

# **small air forces observer**

vol. 22 no. 2 (86)  
July 1998

US \$4.00



**Fleet Model 50K Freighter  
Finnish Blackburn Ripons  
A Soviet Pilot in Spain  
Brazilian Vultee V-11  
Brazilian Naval T-28  
Paraguayan Cessnas  
Nomarlhan Air War  
Yugoslav Emils  
Israeli S-38**

**vol. 22 no. 2 (86)**

**July 1998**



**Paraguayan  
Military Cessnas**  
(captions on page 54)

a  
c  
e  
g

b  
d  
f

# SMALL AIR FORCES OBSERVER

## The Newsletter of the Small Air Forces Clearing House

### TABLE OF CONTENTS

Abstracts	40
El "Tovarishch" Kazakov (Whelan)	42
Fleet Model 50K Freighter (Pink & Devins)	46
The Yugoslav Emils (Napier)	49
Paraguayan Cessna 337/401/402 (Sapientza)	54
Brazilian Navy T-28 (Teixeira)	54
Brazilian Vulture V-11GB2 (Thompson)	56
Israeli S-58 (Lundh)	57
Nomarlhan Air War (Louie)	58
Finnish Ripon (Treichel)	59
Books (Balkan Battles, I am my Brother's Keeper, North American Aircraft, Sharks of the Air, Red Stars, German Aircraft in Finland, Israeli Air Force, Os Primeiros Anos do 1/14 Grupo de Aviao, P-47 B40 Aviao do Dornelles)	61
Magazines (Suomen Ilmailuhistoriallinen Lethi, Revista Forca Aerea, Seventy-Second Scale Modeller, Scale Aviation, INminiature, Ayiatsiya i Vremya)	63
Kits (Kawanishi E15K1 Norm, German Glider Bomb)	65
Decals (Avro Canada CF-100, Aviao Militar Brasileira)	66
Letters (Vaitones, Flores, Oliveira)	67
Wants	67

**SAFO EDITORIAL POLICY:** The purpose of the SAFCH is to "promote interest in the history and modeling of the aircraft of the smaller countries". In support of this goal, the SAFCH encourages international cooperation in researching aviation history, both military and civil, from all periods of time, and for all the smaller countries. In return for this support, members are asked to submit occasional progress reports for publication in the SAFO. While the final results should appear in the most prestigious publication possible, it is requested that the SAFCH be mentioned (with address) in the article and that SAFO be afforded the opportunity of reprinting the material. Article published in SAFO can be reprinted provided permission of the author is obtained and the SAFO is identified in the reprint.

**SUBSCRIPTION RATE:** Subscription to the current volume of the SAFO is US \$12.00 for 4 issues in the USA and elsewhere via surface mail. For the cost of air mail delivery, contact the editorial office, or send \$20.00 and any surplus will be credited to your account. Payment should be made in cash, by International Money Order, or by a check drawn on a bank with a subsidiary in the US made payable to "Jim Sanders". New subscriptions begin with the next issue published after payment is received; if you desire otherwise, please specify which issues are desired. Send remittance to Jim Sanders, 27965 Berwick Dr., Carmel, CA 93923 USA.

**BACK ISSUES:** Either back issues or clean, 2-sided Xerox copies of out-of-print issues are available for all issues of the SAFO published. For a list

of all issues and their content, send two 1st class stamps (or 2 IRCs) to the editorial office.

**MEMBERSHIP LIST:** To promote cooperation between members, a list of SAFO member's names and addresses is available to SAFCH members for \$1.00 plus postage (\$1.00 surface or \$2.00 air mail).

**SPONSORSHIP PROGRAM:** To keep the SAFCH truly international, our Sponsorship Program allows persons who can not obtain US currency to receive the SAFO. Any SAFCH member interested in sponsoring a SAFO subscription for a person from any country where it is impossible or difficult to obtain US currency should write to the editorial office for a list of persons seeking sponsors. If you would like to receive the SAFO but can not obtain US currency, a list of SAFCH members looking for someone to sponsor is also available from the editorial office.

**INFORMATION FOR AUTHORS:** Manuscripts may be submitted in any form; authors whose first language is not English may submit a rough translation of the text and the editorial office will put it into good English. Authors using a computer should send the manuscript on disc. Photo should be black and white prints although color prints can be used. If you want any photos returned, please mark "Return" on the back. All art work must be ready for printing. The layout should be such that when a page is reduced (if necessary) the drawing should fit into the 7.5 inch by 10 inch working area of the final page. Art work that does not fit this requirement will have to be cut and pasted to fit; no problem, but things might not look exactly as you want them to look. All work for the SAFO is voluntary and no payment can be made for published material.

SAFO is distributed in England by Midland Counties Publications, Unit 3 Maizefield, Hinckley Fields Trading Estate, Hinckley, Leics. LE10 1YF. Additional distributors in other countries would be most welcome.

**SMALL AIR FORCES OBSERVER** (USPS 439-450) is published quarterly for \$12.00 per year by the Small Air Forces Clearing House, 27965 Berwick Dr., Carmel, CA 93923. Publication entered at Carmel Valley, CA 93924. POSTMASTER: send address changes to Small Air Forces Clearing House 27965 Berwick Dr., Carmel, CA 93923.

**COPYRIGHT:** Copyright © 1998 by Small Air Forces Clearing House. All rights reserved. The content of this publication cannot be reproduced in whole or in part without the written consent of the publisher and the author.

**LOST MEMBERS:** Anyone knowing the whereabouts of the following 'lost' SAFCH members please inform the editorial office (last known address included): Eric Stoutenburg, Ft. Carson, CO; Curtis Marzolf, Bulverde, TX; E. Tronn,

Montreal, PQ Canada; Alain La Pierre, Maracay, Venezuela; Michael Parr, Prince George, B.C. Canada; Richard Harrison, Stroudsburg, PA; Ellis Estes, Alexandria, VA. Gary Lepinski, Minneapolis, MN; Andrzej Lesicki, Poznan, Poland; Ludoric Lamouroux, Montry, France; Renald Gravel, Quebec, Canada; Scott Fraser, Sidley, BC, Canada. Miguel Angel Sanchez Ruiz, Mexico.

**COVER COMMENTS:** The contributor of the \*misattributed photos of the Kuwait Air Force aircraft that appeared in SAFO #53 has been identified. He is A.J. Moitie of 9A Edward Way, Ashford, Middx TW15 3AY, England. In his letter informing of his identity, he included some more interesting photos of Kuwait aircraft. On the cover, is a Kuwait Short Tucano KAF115 basking in the bright sunshine of Al Jaber Air Force Base. This aircraft has two-tone brown upper surfaces and a light grey undersurface. The spinner, leading edge of the fin, and tip of the wings and tail planes are red. The propeller blades are striped in black and white. The 'KAF115 is black and the wheel hubs are white. The unit badge is blue, yellow, and white with red details. (Moitie)

**TAILPIECE:** The back cover contains more photos of Kuwait aircraft from A.J. Moitie. On the outside: (a) SA342K Gazelle KAF515 at Kuwait International Base in December 1993. The aircraft is overall light grey with black serials and the three white Gulf War identification stripes. (b) Mirage F1CK in standard camouflage of two tones of brown over light grey. Radome and "FREE KUWAIT" are black. On the inside: (a) SA342K Gazelle KAF521 in overall light grey. (b) SA330 Puma in standard camouflage with white Gulf War stripes. (c) Super Puma KAF542 in standard camouflage. (d) Gazelle KAK511 of the Kuwait Police seen at Kuwait International Base. Overall grey with red fin plates and nose panel. "POLICE" in black. (e) Hawk KAF151 at Al Jaber AFB in standard camouflage with black serials on nose and tail. (f) The remains of DC-9 KAF320 after the Gulf War. The badge is black, gold, blue, and white. (Moitie)

**ESTATE SALE:** Hundreds of books and magazines continue to use up valuable space in my office. These will have to be sold or they will be tossed into the recycling bin. This latter would be a real shame since there is some very nice information in this collection. Everything has now been priced to sell: Magazines from \$0.50 to \$1.00; soft-bound books \$1.00 to \$5.00; hard-bound books \$5.00 and up (there are some excellent books remaining). (Non-aviation magazines are now available for free with the buyer paying the postage. This offer will last only a short time before I throw out all the non-aviation magazines.) In addition, a collection of decals has just been obtained. This collection includes many rare and long-unobtainable sheets such as Stoppie and ABT. Send \$1.00 (or two IRC) and a legal-size SASE for list of magazines, books, and decals.

## AUSTRALIA

**AUSTRALIAN PLASTIC MODELLERS ASSOCIATION** (APMA, PO Box 51, Strathfield, NSW 2135; 4 issues sea mail A\$27; air mail A\$30). 1/98 (32 pages) "Bocing B-17E" 2 pages with 6 side-view drawings (USAAF & RAF). "Douglas Wellington IC" one page including a side-view drawing of a Li-2 (DC-3) converted to a Wimpy for a Czech movie. "MAVAG Re-2000 Helja II" one page with one side-view drawing. "Demobbed Wings" 6 pages of drawings of a/c converted to civilian use (B-25, B-26, PB4Y, PV-1, PV-2, TBM, B/A-26, B-17, & PB4Y). "The Bloch MB-150 Series" 3 pages including 7 side-view drawings (Greek, Luftwaffe, Vichy, & French). "Flashes of Inspiration" 2 pages including 7 side-view drawings of photo-recon P-38s (French, USAAF, & civilian). "The Cievra Autogiros" 2 pages including 5 side-view drawings (RAF, French, Spanish, & Argentine). "USN Carrier-Bourne Aircraft Colours of the 1930s" 2 pages including 2 drawings of SB2U. "L'Aeronautique Navale 1939-1940" 5 pages on units, codes, & equipment and a table listing all aircraft and 1/72-scale kits (if any).

## AUSTRIA

**OFH NACHRICHTEN** (Oesterreichische Flugzug Historiker, Felberstrasse 104/7, A-1150 Wien. Write for free sample.) 20-Year (77/97) Index available.

2/98 (36 pages) "40 Jahre Liniendienst Austrian Airlines" 11 pages including 8 photos and fleet list. "Caudron G II" 2 pages including 2 photos. "Display-Tiger" 4 pages including 3 photos of tiger-striped Saab 1050Es.

## BELGIUM

**KIT** (IPMS Belgium, c/o Michel Willot, dreve de Champagne 14, B-1190 Bruxelles; 4 issues US \$25 in cash, International Postal Money Order for 900 BF.

#108 4/1997 (36 pages) "Nieuport 17/23" 7 pages including 9 photos of the 1/32-scale Hobbycraft kit in Belgian colors.

## CANADA

**RANDOM THOUGHTS** (IPMS Canada, Box 626, Stn. B, Ottawa, Ontario K1P 5R7; 6 issues for US \$24.00 in US \$26.00 elsewhere).

25/4-5 (44 pages) "Avalon Airways Catalina" 3 pages including 7 photos of the model. "Hornet Aggressors in the CAF" 2 pages including 4 photos. "Painting Airplanes in 1/1 Scale!" 4 pages including 3 photos. "1/48 Blackburn Firebrand TF.5" 3 pages including 2 photos of model. "Trans-Provincial Airways DHC-1 Beaver" one page with 2 photos of model. "Revell 1/72 Arado Ar 240c-2 Night Fighter" 2 pages including 4 photos of the model. "deHavilland DH.91 Albatross" 2 pages including 2 photos of the model. "Lucky 13" 2 pages on researching the color scheme of the Hellcat flown by the "only Canadian naval ace of WWII"; includes side-view drawing. "Revell P-40E in 1/32" 4 pages including 3 photos of the model. "Additional Schemes for CH-113A Voyageur" 2 pages with 3 side-view drawings. "Canadian Car and Foundry G.23 (Goblin)" 2-page reprint of SAFO article including 5 side-view drawings (Nicaraguan, Spanish, and RCAF). DHC-4 Caribou" 2-page review of Hobbycraft kit including 2 photos of a/c in CAF & UN colors.

## CZECH REPUBLIC

**ZLINEK** (Jaromir Stepan, P.S. 8, 763 14 Zlin 12). Text entirely in English.

Vol.IV No.2 (36 pages) "MiG-29 Fulcrum A/C" 36 pages including 55 color photos, a table of all MiG-29 serving in Central Europe circa 1996, 8 pages of scale drawings, and 14 pages of color multi-view drawings (Czech, Slovak, Hungarian, Polish, German, Ukrainian, and Russian) [Editor's note: A first-rate production of the highest quality in all respects.]

**ZLINEK JUNIOR** (Jaromir Stepan, P.S. 8, 763 14 Zlin 12). Text in Czech.

#9 (16 pages) "Letecko-technicky zkusebni istav Praha" 5 pages including 18 photos (Praga 210, Avia B 135, Avia B 71, Bu 181, Bu 180, Ar 96, Mess. M 27, Skoda-Kauba SK-257, Do 217, & Praga 180) and tables of a/c tested from 1939 to 1945. "Aero 145" 2 pages including 6 photos and a one-page multi-view scale drawing. "Z. Vasich dopisu" 2 pages with tables of Czechoslovak AF crashes from 1945 and 6 photos (Ar 96, Bu 131, Si 204, and Il-28).

**AERO PLASTIC KITS REVUE** (Vydavatelství Model Hobby Press, ul. 1. maje 11, 709 00 Ostrava-Mar. Hory, Czech Republic. 6 issues \$33 surface or \$45 air.)

#52 srpen (76 pages) "Vojenske letectvo Egypta" (4 cast) 7 pages including 9 photos and 13 color side-view drawings (L-29, MiG-21, Su-7, Su-20, MiG-23, PZL-104, FT-6, F-7, Mi-8, Mi-6, Be-12, & Il-38). "North American F-86K" 7 pages including 9 photos, one-page of scale drawings, and 3 color side-view drawings (French, Dutch, & German). "Focke Wulf Fw 58 Weile" (2 cast) 8 pages including 19 photos and 5 color side-view drawings (Slovak, Hungarian, Czechoslovak, & Swedish). "Cessna L-19 Bird Dog" 8 pages including 9 photos, 2 pages of scale drawings, and 4 side-view drawings (South Vietnam). "Kawasaki Ki-102 Randy" 4 pages including 3 photos, a page of scale drawings, and 3 color side-view drawings. "Hawk T.1 a T.1A" (1 cast) 10 pages including 10 b&w and 9 color photos, 3 pages of scale drawings, and color 4-view drawing. "Experimentální verze letounu MiG-19" 7 pages including 10 photos and scale drawings of SM-30 (with launcher) and I-370/I-1.

## ENGLAND

**IPMS MAGAZINE** (Ernie Lee, 51 Ball Road, Hillsborough, Sheffield, South Yorkshire S6 4LZ, 6 issues for £20.00 (US subscription agent: Wise Owl Publications, 4314 West 238th St., Torrance, CA 90505; since exchange fluctuates write Joe for current rates).

3/98 (48 pages) "Swords into Ploughshares" 3 pages including 1/72-scale 3-view drawing and 4 side-view drawings on converting the T-6 or Wirraway into a Ceres cropduster. "Only a flea but... Oho!" 8 pages on the history of the Me-163 and building the Airfix kit including 5 photos of models, 1/72-scale 3-view drawings of Me-163B, sketches of details, drawings of correction to be made to the Airfix and Heller kits, and 4 side-view drawings.

**PLASTIC KIT CONSTRUCTOR** (PAMAG (Publications) Ltd., 3 Lowfield Court, Old Forge Business Park, Sark Road, Heeley, Sheffield, S2 4HG; 4 issues £18.00. In USA/Canada order from J.J. Daileda, 4314 West 238th St., Torrance, CA 90505; since exchange rates fluctuate write Joe for current rates).

#53 Spring 1998 (32 pages) "Dynavector's latest

1:48 scale vacuform - the Gloster Javelin FAW 9" 4 pages including 13 photos of the model. "Airliner Modelling" 2 pages on converting the 1:200 Hasegawa kit into an Air Canada Boeing 767-233er" 2 pages including 3 photos and sketches. "Royal International Air Tattoo 1997" 2 pages including 11 photos (Norwegian F-5A, Dutch Fokker 60U, Ukrainian Il-76, & Hungarian An-26). "Through the Looking Glass: A brief history of the Airborne Command Post and the EC-135C described in detail" 2 pages including 10 photos. And, many kit reviews including the 1/72-scale Aviation Usk Fokker T.V (3 photos of model).

**INSIGNIA** (Blue Rider Publishing, 43a Glasford St., London SW17 9HL, UK.) 4 issues £24.00 surface mail worldwide; £26.00 air mail USA/Canada; £28.00 Australia/Japan. IMO, Mastercard/Visa/Access, or US currency notes. Add £5.00 if paid by dollar cheque.

#8 March/April 1998 (36 pages) "Gloster Meteor Mk. 7.5" 4 pages including 10 photos, a full-page 3-view drawing, and decal sheet. "Polish Training Aircraft" 6 pages including 28 photos (all but one post WWII). "Albatos D.III(Oef)" (Part 8) 4 pages with 18 side-view drawings w/ scrap views of wing insignia (6 Polish and 3 post-WWI Austrian). "Chaco War - Other Types" 5 pages including 9 side-view drawings w/ scrap views of wing insignia [Bolivian Junkers F 13W & F 13L, Sikorsky S-38B, and Vickers Vendance III. Paraguayan DH.60G Moth, Consolidated Fleet Model 2 (3), and SAML A.3] "Air Force Insignia (Part 11) Serbia 1912-18" one page including 5 drawings of insignia and one side-view drawing (Farman HF 20). "Bulgarian DAR Aircraft" 4 pages including 11 photos and side-view drawing of U-1 (Uzunoz-1) and 3 side-view drawings of DAR-1. "Letters" 3 pages including 4 photos (Lohner Type L & T1 and UN Otter and Beaver in the Congo).

**QUARTER SCALE MODELLER** (QSM, Athena Books, 34 Imperial Crescent, Town Moor, Doncaster, South Yorkshire DN2 5BU, England. Subscription: 12 issues £50.00 Europe, £55.00 Rest of World.)

#12 May 1998 (40 pages) "Midway" (Part 1) 10 pages including 26 photos of models, list of participants, available models, and articles on building the Devastator, and Jake. "A Hunter Made for Two" 3 pages including 9 photos of model in Qatari colors. "Night Beaus" 4 pages including 13 photos of the model. "Star and Bar Beaus" 3 pages including 6 photos of model. "Banzai" 2 pages including 8 photos of model Tojo. "Tse-Tse Mosquito" 2 pages including 6 photos of the model and conversion sketches. "Gallic Defender" 2 pages including 7 photos of MS-406 model. "Soviet Aircraft Camouflage" 2 pages.

#13 June 1998 (40 pages) "Miniature Warbirds" 4 pages including 6 photos of preserved a/c, 7 photos of model, and sketches for modeling the F7F-3P Tigercat warbird. "Boomerang" 6 pages including 10 photos of model. "Queen of the Night" 6 pages including 13 photos of model and sketches for modeling a Ju 88G night fighter. "Venom Night Fighter" 3 pages including 9 photos of model and one photo of instrument panel. "Pfalz Wine" 2 pages on modeling the Pfalz D.III including 5 photos of model. "Midway (Part 2) First Contact" 5 pages on modeling a PBV-5A including 16 photos and sketches.

## FINLAND

**Finnish Air Force Special Interest Group**, c/o Niles R. Treichel, Ludigstr. 13, 27432 Bremervoerde, Germany.

**No. 11 (13 pages)** "Finnish Breguet 14" 5 pages including 4 pages of drawings. "Finnish SB-2" 3 pages including 2 pages of drawings. "Finnish Drakens" 2 pages including table listing all Finnish Saab 35s. Included with this issue were a English-language booklet on the "Finnish Defence Force" and pamphlet from the "Central Finland Aviation Museum".q

## FINLAND

**IPMS-MALLARI** (IPMS Finland, PL 798, 00101 Helsinki 10; 6 issues \$20.00, no check accepted due to the high redemption costs).

**#123-124 1-2/1998 (28 pages)** Nothing of small-air-force interest.

**SUOMEN ILMAILUHISTORIALLINEN LEHTI** (InScale 72, Makelankatu 5B10, 00550 Helsinki; Europe \$30, elsewhere \$35; payment by International Postal Order or in cash; no cheques of any kind accepted because of high redemption rates). Each issue includes a 2-page English summary.

**2/1998 (24 pages)** "Flying Refugees" 4 pages including 4 photos of LOT Super Electras escaping through Finland in September 1939. "Malmi Airport - 60 Years" 2 pages with 12 photos of aircraft at Malmi in the early years. "Silver Star at Malmi" 2 pages including 2 photos of the only crash of a 4-engine a/c at Malmi when a DH-86 OH-IPA crashed into a line of parked Buffalos badly damaging BW-384. "Eino Luukkanen" 4 pages including 6 photos and victory list (including a Soviet Spitfire while flying Buffalo BW-393). "VL Puuska - Discontinued People's Fighter" 6 pages on projected high-performance light fighter of 1944 including sketches and two pages of scale multi-view drawings.

## FRANCE

**Air Zone**, Le Nouveau Mensuel de l'Air! (Air Zone, BP n.49, 28210 Nogent-le-Roi, France. A one-year subscription for 9 regular issues and two special issues is 405FF. Payment preferably by check drawn in FRF on a French bank, by draft or postal giro.) Each issue contains book and kit reviews and a one-page summary in English.

**#21 (52 pages)** "20 000 h d'Atlantique a la Flottille 23F" 2 pages including 3 photos. "Derniere etape pour les Mirage III suisses" one page including 2 photos. "Sourire et valncre" 8 pages on Flottille 33F's helicopters including 15 photos (Sikorsky HSS-1 & H-19D and Super Frelon). "Red Flag 98-1" 18 pages including 36 photos. "Operation Miranda" 8 pages including 16 photos (Venezuelan Mirage 50, F-16, & CF-5A). "Quadles Super Frelon jouent les 'Super Pedro': la SAR de combat a la Flottille 33F" 6 pages including 14 photos.

**JETS: Toute l'Aeronautique Moderne** (39 rue A. Briand, 62200 Boulogne Sur Mer, France. 420F for 12 issues).

**#29 Mai 1998 (52 pages)** "Patrouille de France: Cinq mois pour une nouvelle serie" 6 pages including 13 photos. "A-4 Skyhawk: Un bien jeune veteran" 8 pages including 10 photos and table New Zealand Skyhawks. "CV 66 USS America: Derniere croisiere ..." 6 pages including 10 photos. "Le

Breguet Alize de la marine indienne" 4 pages including 9 photos. "Les Mirage pendent la guerre des six jours" 3 pages including 3 photos. "North American F2-J Fury" 10 pages including 16 photos, a 2-page cutaway drawings, and 2 pages of 1/72-scale drawings. "Strong Resolve '98" 3 pages including 7 photos (Spanish Bo-105 & UH-1H).

**#30 Juin 1998 (52 pages)** Color photos: Argentine P-3B '53' and Chilean Bo-105 'C-17'. "La Puissance Aerienne Embarguee" 7 pages including 13 color photos (Spanish Harrier, SH-3H, & Ab-212). "IA 58 Pucara" 16 pages including 16 color & 6 b&w photos, 3 pages of 1/72-scale drawings, and a 2-page cutaway drawing. "Le Cero 306" 4 pages including 9 b&w photos (SIPA 111, Goeland, & Vanneau V). "Le Breguet Alize" (Seme) 8 pages including 5 color and 11 b&w photos (French) and color side-view drawings (Indian).

**AVIONS: Toute l'Aeronautique et son Histoire** (39 rue A. Briand, 62200 Boulogne Sur Mer, France. 420F for 12 issues).

**#61 Avril 1998 (52 pages)** "Le Curtiss-Wright 19R" 5 pages including 16 photos (Dominican Republic, Cuba, & Bolivia). "Des Wibault de casse a aile basse" one page with 2 photos of Wibault low-wing monoplanes 210 and 313. "La saga des biplaces 'Parasol'" 3 pages with 12 photos (Mureaux 110, 112, 113, & 115). "L'extraordinaire Bolkhovitinov 'S'" 6 pages including 14 photos and 1/72-scale 3-view drawing. "Gloster Gladiator" (2eme partie) 6 pages including 18 photos of Gladiators in France, Norway, & Greece. "Du NA-16 au T-6" 3 pages including 10 photos (China, Japan, & Brazil). "Les avions S.E.A: Ou la prehistoire des Avions Marcel Bloch it des Avions Henry Potez" 7 pages including 22 photos of SEA I & IV.

**#62 Mai 1998 (52 pages)** "De Bechereau a Herbemont, c'etait toujours du Spad!" one page with 2 photos of Spad S.XI & A.29. "CG III/4: la desherite" 5 pages including 8 photos and color cover painting of Dewoitine D.510s in service. "Gloster Gladiator" (3eme partie) 7 pages including 12 photos, 1/48-scale drawings of Sea Gladiator, and 3 color side-view drawings. "Du NA-16 au T-6 - Succes en France assure: Le NA-57 y fut le bienvenu ..." 8 pages including 26 photos and a 2-page cutaway drawing. "Les Dewoitine D1.C1 en service dans l'Aviation maritime francaise" 6 pages including 11 photos.

**#63 Juin 1998 (52 pages)** "Objectif: New York" 9 pages including 18 photos and a color cover painting of an Italian bomber over New York Harbor (Cant Z.511, Piaggio P.23R, & SM 95). "Les chasseurs Sikorsky" (1ere) 6 pages including 19 photos (S-8, S-10, & S-16). "Gloster Gladiator" (3eme) 5 pages on Belgian Gladiators including 14 photos. "Du NA-16 au T-6" (6eme) 7 pages on MA-57 in Vichy service including 15 photos and 2 pages of 1/72-scale drawings of the NAA-57. "Les Dewoitine D1.C1 en service dans l'aviation maritime francaise" (2eme) 6 pages including 10 photos and 3 color side-view drawings.

## GERMANY

**MITTEILUNGEN** (IPMS Germany, Bergengruenstrass 5-7, D-1000 Berlin 38; 12 issues DM 60.00 Europe, DM 65.00 USA, DM 70.00 Japan, DM 75.00 Australia).

**2/98 (40 pages)** Nothing of small-air-force interest.

## ITALY

**NOTIZIARIO DI PLASTIMODELLISMO** (CMPR Club Modellismo Plastico Ravenna, PO Box 96, 48015 Cervia) Four issues L 45.000 sea mail or L 50.000 via air mail. Payment by cheque or IMO, Italian funds preferred.

**1/98 (36 pages)** "L'"A.R." Questo Sconosciuto" 7 pages including 5 photos of the Aero. Lombarda A.R.. "L'Aerofond o Ascoltatore" 6 pages on Italian sound location unit including 6 photos and a page of drawings. [Editor's note: This would make a nice addition to a diorama of a WW-2 Italian airfield.] "Un PG. 808 Special" 5 pages including 2 photos and 2 pages of drawings of a colorful PD.808.

**JP-4 (JP-4, CP 1550, 50100 Firenze; L 27.000 Europe, L 30.000 elsewhere).**

**#5 Maggio 1998 (100 pages)** Color photos: Chile Mirage 50 '503' and Mirage SBA. "FIDAE '98" 6 pages including 18 photos (Venezuela F-16, Chile Caravan, & Ukraine An-74). "ATR per la Guardia di Finanza" 6 pages including 13 photos (ATR, P.166, & AB.412). "Coppa Schneider le Regole" 3 pages including 4 photos (M.39, M.67, M.72, & S.13). "S° Stormo" 4 pages with 2 color side-view drawings (F-104S & F-84F). "L'ultimo caduto" 6 pages including 9 photos and one map of "last fallen airman of WW2". "Musei portoghesi" one page with 4 photos of a/c in the Portuguese Aviation Museum (Hurricane, T-38, Widgeon, & G.91R).

## NETHERLANDS

**MODELBOUW IN PLASTIC** (IPMS-Nederland, PO Box 40082, NL-8016 DB Zwolle). Now with English captions and summary.

**1/98 (32 pages)** "TrueType" typeface for use in making your own decals for "KON. MARINE" and "ROYAL NETHERLANDS AIR FORCE" inscriptions.

## POLAND

**FANATYK PLASTIKU** (ul. Slowackiego 2, 39-400 Tarnobrzeg, Poland.)

**#18 (36 pages)** "Dunskie Gauntlet'y" 6 pages including 13 photos and 2-pages of 3-view drawings. "PZL P-11" 3 pages including 5 tone (Polish & Romanina P-11c) and 5 color side-view drawings (Polish & Romanian P-11a).

**#19 (36 pages)** "Feralne Manewry puckiego MDLot" 3 pages including 5 photos and one side-view drawing (Lublin R-VIII & R-XIII). "V-1" 5 pages including 4 photos and 4 pages of drawings. "An-2" one page of sketches of interior details. "PZL P-7" 2 pages with 6 side-view and 3 plan-view drawings.

## USA

**WWI AERO** (15 Crescent Rd., Poughkeepsie, NY 12601; 4 issues \$30.00 USA or \$30 overseas).

**#160 May 1998 (148 pages)** "Duigan and Roe: a Question of Influence" 13 pages including 2 photos. "Rickenbacker Revisited" 9 pages. "The German Air Force" 15 pages including 19 scale 3-view drawings (Albatros B.I, C.I, C.III, C.V, C.VII, C.X, C.XII, C.XV, J.I. & J.2). "The Liberty Engine" 19 pages including 27 photos. "Whom do you Believe?" 5 pages including 10 photos of Fokker E.IV. "Cockpits/Instruments" 7 pages. "Drawings" 10 pages including Ordnance Scout, Bristol Scout, & VE.7).

## El "Tovarishch" Kazakov

copyright © 1997 by Paul Whelan

"Rocket in flight, the pilots sprint to their Chatos and begin their take offs. As the Escuadrilla assembles over the field, we turned and headed towards Teruel. Approaching the lines, we see 12 Heinkel He 51s. I give the command to attack and the Chatos rush to meet them ...." (1)

On a freezing cold morning in December 1936, 29-year-old Air Force squadron commander Aleksandr Petrovich Osadchii entered the office of the Commander of the Kiev Military District. He had received an order to appear before the Commander, Iona E. Yakir. Although he was a little nervous, in general he felt good as he surmised that the meeting was in response to his request for duty in Spain.(2) He had been born May 29, 1907, joined the Soviet Army in 1929, and, in 1931, attended Flight School #2 in Borisoglebsk. At the time, he was the commander of a fighter Eskadrili and hoped that his position would not prevent him from being allowed to go.

At the time Osadchii entered Gen. Yakir's office, there were already many of his friends and Countrymen fighting and dying in Spain. The Soviet Union had begun, in October 1936, to militarily support the Government of the Spanish Republic in their not-so-civil war against the forces of General Francisco Franco, who was receiving aid from Nazi Germany and Fascist Italy. Between the months of October and December of 1936, Soviet Merchantmen had delivered to the Spanish ports of Alicante and Cartagena approximately 31 each of I-16, SB-2 and R-5 aircraft and 25 I-15 Chatos (3), plus several hundred air crew and ground personnel.

The Commander rose from his desk, shook his hand and asked him to be seated. Yakir proceeded to tell him that he had been highly recommended by his Brigade Commander. He then went on to talk about Osadchii's excellent record. After which he told him that his petition to go to Spain had been granted. He also said that more than likely he would be replacing Pavel Rychagov (4), who was, in a few days, to be awarded the order of Hero of the Soviet Union. Osadchii thanked General Yakir and left to prepare for his coming journey, leaving the next day for Moscow. There, he picked up all his documents, one of which, his service payment booklet, listed him as Kazakov, a name he would use during his stay in Spain.(5) This use of a nom de guerre was Soviet standard procedure for their people in Spain. He left Moscow 10 days later, boarding a train for Paris. During his passage through Poland and Germany, he kept a low profile to avoid being stopped by Border Guards or Police. Arriving in Paris, he boarded another train for his journey into Spain. This train had to stop at the French-Spanish border for customs check. Fortunately he was not stopped as France's embargo on volunteers as part of the "Non Intervention" charade had not yet begun and he proceeded on to Barcelona, Valencia, and eventually entered Albacete.

At that time, Albacete was not only the Headquarters of the International Brigades, but also the seat of the Soviet Chief Adviser to the Spanish Republican Air Force, General Douglas. This was the nom de guerre used by Yakov Vladimirovich Smushkevich who, up until the time he went to Spain, had been Commander of the 201st Mixed Aviation Brigade.(6) Now, in the autumn of 1936, he was in overall command of the Soviet Air Group in Spain.

Douglas greeted him warmly, and spent some time advising him

of the general situation in Spain and particularly on the Madrid front, where Rychagov's escuadrilla was fighting. He was told that the crews consisted mainly of Spanish pilots who were learning to fly the I-15. Douglas said Rychagov would fill him in on the rest, and ask if he knew Rychagov. Osadchii told him they had graduated from Flight School together and had also served in the same brigade for several years. On parting, General Douglas said to him "Good luck Comrade Kazakov".(7)

In the morning, he left by car with a Spanish driver for Alcala de Henares some 200 miles away. Here he met Pavel Rychagov, delivering to him a photo of Rychagov's wife Maria Nesterenko, who, also a pilot, had just been awarded the order of the Red Star. Rychagov told him that Douglas had called saying that his replacement was on the way. Then he said, "But I never guessed that Kazakov was you." (8) On his first night at Alcala, there was an air raid. Fortunately for him the bombers missed their target, the airfield, and hit the town.

Members of the squadron at that time were Russians Pavel Agafonov, Nikolai Artem'ev, Georgii Zakharov, Vladimir Puzeikin, Emel'ian Kondrat, Aleksandr Zaitsev, Anton Kovalevskii, and Spaniards Eduardo Guaza Marin, Alfonso Cabo, Jose Cuartero Pozo, Emilia Galera Macias, Alonso Jimenez Bruguet, and Andres Lacalle. At this time, the squadron was split with a detachment of two patrullas being dispatched to the Malaga area, now under assault by forces of the CTV (Italian Expeditionary Forces in Spain). This group included Russian pilots Kovalevskii, Kondrat, and Artem'ev. On the 24th of January, Andres Lacalle began organizing a new squadron which would contain Spanish and American pilots. At the same time Osadchii took over command of Rychagov's squadron (9) and added at least two new pilots, Americans Albert Baumler and Charles Koch.(10)

On the Malaga front, on 1 February 1937, during the interception of Italian SM 81 bombers, Anton Kovalevskii whose name in Spain was "Kasimir" (or "Casimiro" to the Spaniards) was hit by fire from the bomber he was attacking and killed. Osadchii brought the rest of the squadron from Albacete into Tabernas airfield (Almeria) on 10 February three days after the fall of Malaga. On this day the new arrivals flew their first mission on this front, escorting two Potez 540 bombers of the "Escadrille Malraux" on a mission to bomb the roads around Motril, which fell at noon that day. This mission was completed without encountering either enemy fighters or AA.(11)

On the 11th, they again escorted two Potez 540s. With the escort of five Chatos, their target was again the Motril area, but this time the enemy was expecting them. The formation was intercepted on its return by some 10 Fiat CR 32s and both Potez were shot out of the sky. Potez 'B' crash landed on the beach of Castell de Ferro (12) with a badly wounded copilot (who died the next day). Potez 'P' crashed near Dalias.(13) Of the attacking Fiats, one flown by Adriano Mantelli de Parma "Arrighi" was shot down over Motril by G. Zakharov.(14) Albert Baumler describes this kill for us, "From out of the sea, it seemed a streak of greenish gray. A twisting animated something that was moving so fast that it was difficult to distinguish what it was. For an instant this speck of blur hovered near the Potez, then left it, and came up under the belly of another bomber. ... I try to get a bead on the thing, but I can't. The long wisps of smoke from



Kromberg's (G. N. Zakharov) ship are reaching out in beautiful streamers towards the sea in the early dawn. Then suddenly I see the best piece of shooting I've ever seen. Just as quick as that, the thing is no longer a line of motion, it is falling end over end. There is a splash in the sea and that is the end of an enemy pursuit plane." (15) In truth, the Fiat came down in the surf as the wreckage was found on the beach at Motril. (16) Charles Koch who was flying Chato #34 (17), also described this mission. "The bombers were flying at an altitude of 3500 feet over the sea. We, their escort, stayed inland over the mountains at 18,000 feet. ... As we approached Malaga (Motril?), the bombers swung in towards the city. .... Everything was going to schedule. We could see bursts as the bombs hit. ... Suddenly from the direction of the sea, three small green airplanes appeared, diving on our bombers. ... By the time we got within range, the enemy had accomplished their deadly work, both bombers were in trouble. During our dive we had fired at the enemy and a lucky shot got one of them." (This was Zakharov's kill.) Going after the other two Fiats, Koch continues, "It was my turn to dive down now, slightly past the vertical so as to lose altitude in a hurry. I opened my sight and kept him in it for over a thousand feet before I touched my triggers. When I did, it was impossible to miss. ... Smoke started pouring out behind his engine, then his ship fell off on one wing and curled into a spin." (18)

On the 12th, the entire squadron flew to Almeria, after which they delivered a ground attack mission in the Motril area. It consisted of dive bombing Franco's supply lines on the Malaga - Motril road. The squadron approached the target at approximately 2000 meters. There was a long line of trucks below heading for a warehouse. The aircraft went into their dives in three plane vees, releasing their bombs then pull up leaving the area. The area for a quarter of a mile around the warehouse was black with smoke. (19)

From the base at Almeria, the squadron flew several sorties in protection of the Battleship Jaime \*Primero, and on one occasion going after the Cruiser \*Canarias. (20) On the 18th, the squadron returned to Albacete and the next day transferred to the field at Tembleque, some 50 miles south of Madrid. From here, they participated in the final days of the battle of Jarama. Again, on the 24th, the squadron transferred up to the field at Alcala de Henares. Due to bad weather, no missions were able to be flown between 25 February and 4 March. From Alcala, the squadron flew several reconnaissance missions over the Madrid area and had several bomber intercept missions. (21) The squadron remained at Alcala during the first few days of the battle of Guadalajara, moving to Campo Soto (Algete) on the 10th. (22) After reconnaissance had revealed extensive Italian troop movements, the enemy apparently thinking that in the rainy and misty weather they had nothing to fear from the Republic's aviation. "Therefore, Smushkevich (Gen. Douglas) took the bold decision to have all aircraft take off, which would allow us to catch the enemy by surprise. He ordered that the highest possible number of operational sorties be performed in order to cause as much grief and heavy losses to the enemy. (23) ... At a low altitude, under a cloud base at 200-300 meters, our aircraft fell upon the unsuspecting Italian column in the area of Trijueque. The blow was shattering. Every bomb landing on target. Machines burned, soldiers ran in panic on both sides of the (Madrid-) Zaragoza highway, and the pilots freely poured machine gun fire on them. Their feeble attempt to drive off the Chatos with anti-aircraft machine guns led to nothing. As soon

as one uncovered itself, we neutralized it with our bombs, acting as if on the training range." (24)

"On that day (11th?) the escuadrillas delivered that sort of blow five times. But, in one of the flights I got hit. During the attack, while diving in my aircraft, an anti-aircraft shell hit. The first wing spar was smashed, and the port side of the fuselage was riddled with fragments. Fortunately I succeeded in getting back to the airfield" (25). Upon landing Osadchii found that his left wing had a hole in it almost a meter in diameter. His mechanic found it hard to believe that the Chato could fly with such damage. (26) The next day brought the same rainy, snowy weather, but still the Chatos attacked. The following day, with the cloud base at 500-600 meters, "We cooperated with the (R-5) assault aircraft and their escorts in the air, and were pleased with the successful suppressing of the enemy's anti-aircraft means. Only towards the end of the day did a group of Fiats appear. In the first frontal attack, one enemy machine was shot down." (27) Osadchii goes on to say, "Besides low flying assault and air cover, the pilots of my escuadrilla shot down four Fiats. Only the last days of this operation was darkened by the loss of our dear friend, the Spanish pilot Carlos Guaza." (28) Two of these Fiat losses were recorded by Albert Baumler, who wrote in his Flight Log for 16 March, "At approximately 1130 on 16 March 1937, in the sector Birhueva-Valdeste-Pajares, I engaged an enemy plane, marca Fiat 41 (sic) in combat. Opened fire in dive at point-blank range. Another friendly plane piloted by Alesandrof Nicolasvitch Zeitsoff (Aleksandr Andreevich Zaitsev) also fired at this same plane, which fell to the ground in the above named sector. Confirmation granted in subsequent reports: 1/2 for

Baumler, 1/2 for Zeitsoff". On the 20th, he writes, "Flying 'Mosca 222' (sic) on one-hour flight, 4th of the day out of Soto Madrid. Combat 1 Fiat at 5:00 p.m. while flying in first patrol of squadron in command of (Roberto) Alonso. I observed a patrol of three Savoia-Marchetti escorted by five Fiats. I gave the attack signal and the squadron moved on the Savoias. The Fiats turned and I attacked one, engaged in combat alone and shot his gasoline tank. He lost altitude constantly and finally crashed in flames 10 kilometers S.E. of Brihuega in arroyo in our territory."

On the 6th of April, in preparation for a planned attack on Huesca, the squadron transferred from Campo Soto to Balaguer (Lerida). The ground forces to be used in this attack were drawn from the Anarchist and P.O.U.M. units and included the Ascaso Division and the Division Marx, with the Durruti Division in reserve. The objective of this attack for the Regiments Rojo y Negro and 19 de Julio was to cut off a narrow salient which connected the town of Huesca with the Nationalist held area and for the Regiment Durruti and Column Lenin to attack and occupy the town. The operation was a failure despite many bombing and support missions being flown by the aviation units in the area. Osadchii says, "On the first day we conducted three battle sorties to assault the enemy positions. Our luck was absolute. The only anti-aircraft gun which had time, succeeded in letting loose on our aircraft only a few bursts and was hit. We thoroughly worked that area. It appeared every living thing in it was destroyed. It remained only for the infantry to strike, and the Huesca Garrison would be completely cut off. But the Infantry for some reason delayed." (29) The squadron had again transferred fields on the afternoon of the 8th, going to Castejon from which they continued to operate against the Huesca area until the afternoon of the 13th. (30) When "Douglas" learned what

was going on in that sector, he ordered Osadchii to leave and go to the Teruel area. When Osadchii communicated his orders to the Anarchist Commander, he refused to allow them to leave, and placed them under "House" arrest. "Thus we found ourselves under arrest. The whole of the following day (12 April?) we did nothing. ... In the morning I quickly sent Jimenez to the Commander, he reported to him that Duglas had agreed to prolong our stay in this sector and we ask him to indicate targets for our next low level attack. ... Well then, we carried out this ground assault, but did not return to the former aerodrome, but made a landing on Duglas's orders at a site close to Teruel." (31) The field they landed at was Sarrion which Tinker describes as "a fine, large, dry field just outside of a small town, Sarrion. Its only drawback was it was very hot and dusty. It was about fifteen miles from Teruel and sixty from Valencia." (32) Tinker says when his squadron and the Russian one from Alcala (I-16?) landed, there was already another biplane squadron on the field under command of Kosokov (Osadchii). (33)

Tinker wrote that Kosokov was technically in command of all three Chato squadrons at Sarrion (34), being those led by Jimenez, R. Alonzo Santa-Maria and Osadchii (Kazakov). Tinker and Baumler had also nicknamed him "The Old Stud". (35) On the 16th, during a morning patrol mission, a patrulla of the Kazakov escuadrilla ran into a patrulla of Heinkel He 51s. In the ensuing dogfight, one of the Chatos, that flown by Luis Tuyá, was shot down by Angel Salas, leader of the He 51 patrulla. (36) According to Tinker, Tuyá had only a short time before been transferred to Kazakov's squadron from the one which Tinker flew in under the command of Jimenez. (37)

On the 17th, according to Comas, a formation of 15 Chatos took off from Sarrion. This group, made up of aircraft from the three squadrons, were flown by Kazakov, Victor, Leon, Tinker, Baumler, Aquirre Palomar, Bastida, Magrinya, Calvo, Rubio, Gascon, Santamaria, and Comas, plus one other which Comas mistakenly says was Tuyá. (38) This formation was just passing Puerto Escandon when they encountered three escuadrillas of He 51s flying in two echelons, one at 4000 meters and the second at 5000 meters. Six of the Heinkels had been pursuing a "Katiuska" (SB-2), and as the Chatos intervened, the Chato flown by Calvo collided with a Heinkel flown by Jaime Palmero. Osadchii says "After the first attack, the Heinkels scattered and then departed downwards. Here I noticed falling fragments of some aircraft. A little later I discovered that my port wingman had vanished." He also claimed a Heinkel "There is already one Heinkel exiting out of the battle, behind it stretched a trail of smoke. Apparently hit in the fuel tank or with damage to the engines cooling system. ... I made a swooping attack on the Fascist and, from roughly a distance of 100 meters hit him with all my machine guns. The Heinkel caught fire and, like a smoking chimney, began towards the earth. ... I selected another target - the Heinkel turned to attack our aircraft. I turned for his tail and hit him in a long turn. The Fascist endeavored to escape, but after repeated attacks, he crashed into a rocky ravine." (39) The Republicans claimed four Heinkels and the Nationalist claimed seven "Chatos" during this battle. But the facts seems to change these claims. The 6 Heinkels involved were from the 2nd escuadrilla of I-G-2. These were flown by Angel Salas, Javier Allende, Joaquin Ansaldó, Jorge Muntadas, Rafael Mazarredo, and Palmero. Of these Palmero was lost, all the rest received many impacts, Salas had 18 in his a/c, but all aircraft landed safely except Allende who crash landed after being shot up, possibly by Comas. The

Republicans had lost only Calvo and his "Chato". (40)

The Escuadrilla continued flying missions over the Teruel front until the end of the month, moving back to Campo Soto in the beginning of May. During the last days of April 1937, Georgii Zakharov returned to the USSR and two other members of the squadron, Aleksandr Zaitsev and Vladimir Puzeikin, transferred to the I-16 squadron (later 1st Esc. de "Moscas") under command of Konstantin Kolesnikov. (41) On the 3rd of May, Frank Tinker transferred from the old Lacalle Esc., now under Jimenez, to Kazakov's Esc. which allowed him and Baumler to fly together. (42) During the first half of May, the escuadrilla seems to have been on light duty flying mostly reconnaissance missions over enemy positions. On the 15th, several of the squadron's Spanish pilots and their aircraft were joined with pilots from other squadrons and sent to the Basque Country on the Northern front. Baumler mentions that he test-flew Fiat CR 32 #511 on the 19th. There was a period of squadron inactivity after the Spaniards left with very little flying. (43) Then, it seems that the squadron was either turned over to Spanish control or dissolved at the end of May. On the 29th, both Tinker and Baumler were transferred to the I-16 squadron, now under command of Valentin Ukhov after the May 12th death of Kolesnikov. Osadchii says that, after saying his good-byes, he departed for Alcala de Henares where he reported to Evgenii Savvich Ptukhin "General Jose", Soviet Commander of Fighter Air Group. Ptukhin had only a few days earlier replaced the previous commander Petr Pumpur "Colonel Julio". Osadchii was assigned to the Command Staff to deal with coordinating operations between aviation and ground forces. (44)

For these operations, they transferred a new "Chato" squadron under command of Zatsepko (45) "Zorki" which performed several low level attack missions together with the "Rasantes" of Grupo 15 under cover of Ukhov's and Pleshchenko's I-16s. On the fourth and last mission (approx. 6:00 pm) of 2 June, over the La Granja de San Ildefonso area, the formation of 13 I-16s, 12 "Chatos", and 4 "Rasantes" was intercepted by what Tinker claims was a force of 50 Fiats and Heinkels of which he says nine were downed (46). But Republican losses were also high. Within the first minutes of the battle, Zatsepko's "Chato" was shot out of the sky. As the battle continued, one I-16 (possibly that flown by Fedor Kolosov) and one R-5 "Rasante" flown by Eugene Finick were also downed, with only Finick surviving. (47)

As Zatsepko's squadron was now leaderless, Osadchii says that Ptukhin ordered him to take over command as the pilots were still green. Around the 11th or 12th, the squadron moved to the field at Castejon, where, in conjunction with the Lakeev I-16 detachment (6 a/c) from Ukhov's squadron, they began operations in the Huesca area in hopes that it would draw off enemy forces from the Basque front. At Castejon, the squadron members met Aviation Adviser V. N. Lopatin, known as "General Montenegro" who had replaced Smushkevich at the beginning of June 1937. They continued to perform many missions on this front until the end of the month, moving back to the Madrid front when the battle of Brunete began. (48) Osadchii says during one of his last air combats in Spain he downed two Fiats, "My turn in something like an instant passed over the Fascist, and that was enough! The hostile aircraft shuddered as if it stumbled on an invisible obstacle, began to stagger, and suddenly started towards the earth. ... So that I found a Fiat in my sights and I pulled the trigger, I gave it a long burst from all four machine guns! The Fiat tilted to one side and went headlong



downwards."(49)

Osadchii had now served more than six months in Spain, and in mid July returned home. Later, at an award ceremony in the Kremlin's Georgievskii Hall, he received from the President of the USSR, M. I. Kalinin, his first Order of the Red Banner and also, at a later date, the Order of Lenin.

During the Second World War, he rose to the rank of Major General of Aviation and commanded the 11th Guards Fighter Aviation Division for which he received the Gold Star of the H.S.U. (Hero of the Soviet Union) on 27 June 1945.(50) Other medals he received were, another Order of Lenin, three more Order of the Red Banner, Order of Suvorov 2nd Class, Order of Kutuzov 2nd Class, Order of the Patriotic War 2nd Class, plus others. Osadchii retired from the Air Force in 1949 and lived in Kiev. He passed away on March 3, 1981.

## References

1. Osadchii, "Druz'ya I Soratniki" (Friends and Comrades-in-Arms), in Vmeste s Patriotami Ispanii, Politizdat Ukrainy, Kiev 1986 p.175-6.
2. *ibid.*, p.166.
3. Vinas, El Oro Espanol en la Guerra Civil, Instituto de Estudios Ficales, Ministerio de Hacienda, Madrid 1976, p.265.
4. Osadchii, *op. cit.*, p.167.
5. *ibid.*, p.167.
6. Rumyantsev, Geroi Khalkhin - Gola, Voenizdat, Moskva 1989, p.47.
7. Osadchii, p.168.
8. *ibid.*, p.168.
9. *ibid.*, p.170, also Zakharov, Ya Istrebitel', (Voenizdat, Moscow 1985), p.69. This seems to contradict what Andres Lacalle says in Mitos Y Verdades, (Ediciones Oasis, Mexico, D.F. 1973). On p.538, he wrote "Jose (Ivan Kopets) tomo el mando de la escuadrilla de Rychagov al ser este retirado del frente". At the time of Rychagov's departure, Kopets became Commander of Grupo 26 (Chatos), Lacalle at that time was forming a new squadron (mid January 1937). Lacalle p.25 says that Rychagov was retired and evacuated in Dec. 1936, but Osadchii did not arrive in Spain until early January 1937.
10. Baumler Flight Log - Spain, and Herr, "On the Edge of Greatness, the aviation career of Charles D. Koch", in AAHS vol.30 #3 Fall 1985, pp.219-234.
11. *ibid.*
12. Laureau, La Aviacion Republicana Espanola 1936-1939, Vol.1, Self Pub. p.91. See also two articles entitled "Les Derniers Potez de Malraux", the first by Domingo Bochaca and the second by Laureau, pp. 108-113 in Icare #130, La Guerre d'Espagne Tomo 2, but these unfortunately mention nothing of the two Americans or Zakharov being in the escort. Howson, Aircraft of the Spanish Civil War, (Putnam, London 1990) p.255 says "two Potez were lost, one (P) crashing on the shore..." and Pedriali, Guerra di Spagna e Aviazione Italiana, (Nuovo Studio Tecna, Roma 1992) pp.159-161 says the attacking force was only a patrulla of 4 Fiats and also that the Potez were coded B & N. While Ricci, Vita di Pilota, Mursia, Milano 1976 p.45 says that two of the attacking Fiats were damaged, by their only 12.7 ammo. See also Sarbaugh papers on Potez 540 Coded "B" 1936-1937 and Potez 542 Coded "P" 1936-1937, unpublished.
13. Salas Larrazabal, La Guerra de Espana Desde el Aire, (Ediciones Ariel, Barcelona 1972 2nd Ed.) p.159.
14. Baumler, Flight Log, also Zakharov, p.65.

15. Baumler, The Shreveport Journal, series of articles in, Feb. 1941. Pedriali, p.161 contains a testimony, written by Mantelli in 1981, in which he claims to have been hit by fire from the turret of the Potez (N) he was attacking.

16. Salas, p.159.

17. Herr, letter to author.

18. Herr. *op. cit.*, p.230.

19. Baumler, Shreveport, he also said he became momentarily disoriented due to not thinking his bomb release had worked the first time, and on the way from the target experienced some close AA fire.

20. Baumler, Flight Log, also Zakharov, p.64.

21. Baumler, *op. cit.*

22. Baumler, *op. cit.* Baumler also lists a ground strafing mission on the 10th, but see fellow squadron member Puzeikin memoir "In Spanish Skies" in Leningradtsy v Ispanii, (Lenizdat, Leningrad 1989), p.13; he wrote that on 9 & 10 March although the Republics Aviation was ready to strike, the weather was too bad to permit fighter operations. Tinker, Some Still Live, Funk & Wagnalls, N.Y. 1938, on the other hand pp.121-124, writes that part of his squadron got off on the 9th but that the 10th was a wash out. pp.124-126 he writes of a strike on the 11th. Baumler, *op. cit.*, does not mention anything on the 9th or the 11th, While Puzeikin, *op. cit.*, writes "11 March - All day rain fell with clouds at 150-200 meters. Nevertheless reconnaissance aircraft discovered, in Brihuega, a gathering force of Italian fascists. The 'Chato' squadron attacked the enemy suddenly, The Italians had not thought, that in such weather take offs would be possible. The assault blow from a height of 150 meters was effective on the outcome. The Italians ran around in panic". Another source on those first days of Guadalajara, is Finick, "Bombers Aloft" in True, Aug. 1939. Finick was a member of Grupo 15, flying R-5 Rasante biplane Shturmoviks. He says, on p.79, that he was at a hidden field in the Toledo province, nearly 200 miles from Albacete. The closest base to that information, would be Santa Cruz de la Zara where the 2nd Escuadrilla of Grupo 15 under Aleksandr Strelkov was based. This Grupo was commanded by Major Konstantin M. Gusev "Vochev", Headquarters and 1st Escuadrilla under Viacheslav Leviskii, were based at Quintanar, de la Orden, while the 3rd. under Nikiforov was at Villamajor. On p.86, Finick says "We were ready within a short time, but rain streamed down until we were forced to clean out the bomb racks. ... The next morning we were on the field early, but rain kept us tied to Terra Firma. ... By nightfall the Italians had taken Brihuega" (this was the 10th, Salas, Historia del Ejercito Popular de la Republica, Editora Nacional, Madrid 1973 Vol.1 p.869, "El dia 10 los Italianos logran conquistar Brihuega") Finick, on p.87, goes on to say that they finally got off the ground in the afternoon of the next day (11th), taking off in the pouring rain and mud, to make their first of two missions that day. 23 Osadchii, p.172.

24 *ibid.*, p.173.

25 *ibid.*, p.173.

26 *ibid.*, p. 173.

27 *ibid.*, p.173.

28. *ibid.*, p.173. Baumler's note in his Flight Log "3/24 Eduardo Guaza Marin killed in collision with three planes completely lost".

29. *ibid.*, p.174.

30 Baumler, Flight Log. Another problem which arose on that day although not mentioned by Baumler: during a take off for a

Continued on page 53

# The Fleet Model 50K Freighter

Maurice Pink with Bill Devins

The Fleet Freighter embodied all the attributes of a classic Canadian bush plane. Designed for hauling heavy loads in remote areas of limited access, it was intended for use mostly on float or ski undercarriages, but with the alternative of wheels if required. It also incorporated special features which made it ideally suited for use in the north where normal facilities were non-existent or at best scarce. These features included easy freight loading access, a short take-off run for use in restricted areas and the capability to be broken down into relatively small components to facilitate shipment and replacement of parts in the remote reaches of the Canadian bush.

The Fleet Model 50K utilized steel framing throughout, with wooden outer wing spars. The nose, wing center sections, nacelles, fins, and adjustable stabilizer featured metal stressed-skin covering, while the outer wing panels and tail control surfaces were fabric covered, along with the majority of the fuselage. The upper and lower wings were attached to the fuselage top and bottom longerons respectively, eliminating the need for cabane struts. This unique design was unusual in that it was completely devoid of external bracing wires. The wing cellule included a single diagonal strut on each side which connected the nacelle to the lower front interplane "N"-strut, while the landing gear incorporated no side bracing at all.

Special integral monocoque pedestals carried the 26-ft 2-in EDO Type 56-7850 floats, although wheel or ski undercarriage could be substituted, albeit at a severe aesthetic penalty! All landing gear options were mounted at the base of the "V" of the inverted gull lower wing, and a distinct resemblance to the Noorduyn Norseman's robust undercarriage arrangement was evident, particularly when the Freighter was seen without the outer wing panels in place. The location of the undercarriage mountings and lack of external bracing enabled the float Fleet to straddle low docks and have loads winched directly up through the floor hatch into the cabin. Freight could also be loaded through large doors on both sides of the fuselage, and the lower nose section was removable so long cargo, like lumber, could be slid directly onto the reinforced freight floor.

The cockpit layout provided for control from either the left or right seat with a control column which allowed the wheel to be swung to either side, another Norseman-like characteristic. A hatch incorporating the center windscreen panel opened outwards to allow for mooring access.

In addition to being sold as a bush plane, the Freighter was offered as a small airliner with seating of up to 10 passengers according to various seating arrangements. At least one seven-passenger model was used by United Air Transport of Edmonton for their Vancouver-White Horse run. Other configurations allowed for use as an air ambulance, aerial photographic surveyor, and a military type with three gun positions. It is not clear

if all of these versions were actually produced, as only five aircraft were built before production stopped, partly due to the outbreak of WW II, and partly because engines of sufficient power were unavailable.

The prototype Fleet 50K, registered CF-BDX, probably made its first flight in 1938. Other civilian registrations included CFBJT, 'BJU, and 'BJW, implying that CFBJV may have been allocated to the fifth machine. At least three examples, CFBDX, 'BJU, and 'BJW, appeared on floats at some time in their lives. Two of the Fleet 50Ks were evaluated by the Royal Canadian Air Force. The RCAF assigned numbers 799 and 800 to their Freighters, which seem to have operated mostly, if not exclusively, as landplanes. I have not been able to correlate the RCAF numbers to "CF-" registrations.

None of the five Fleets had a very long useful life due to crashes or fires. The prototype crashed in a British Columbia forest, and CFBJT burned out on its delivery flight while being run up on a hot day at Chicago's O'Hare Airport. The longest-lived example was RCAF number 800, which after a short period of military service was sold to Mexico where it was registered as XADOE in 1944. It was written off in 1946. Some Freighter remnants awaiting restoration are known to survive in storage at the Canadian National Aviation Museum in Ottawa, the last physical reminders of a truly unique Canadian.

## Fleet 50K Freighter Specifications

Engines: 2x Jacobs Model J 285-hp 7-cyl radials or 2x Jacobs Model K 330-hp 7-cyl radials  
Propellers: 2x Curtiss-Reed metal, fixed pitch, 8 ft 6 in diameter x 75 in pitch  
Span - (upper): 45 ft 0 in  
(lower): 43 ft 4 in  
Length (landplane): 35 ft 10 in  
Total Wing Area: 528 ft<sup>2</sup>  
Maximum Speed: 150 mph  
Cruising Speed: 132 mph  
Cruising Range: 660 miles  
Useful Load: 3000 lbs

## References:

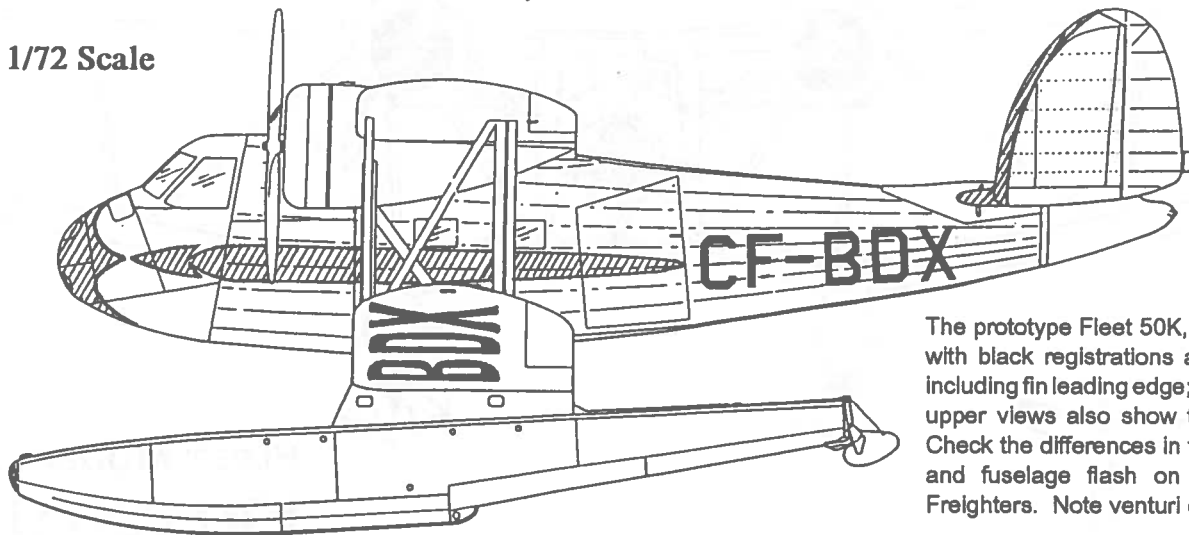
Aero Digest, 1938. (exact date unknown)  
Canadian Aviation, May 1938.  
Canadian Aviation Historical Journal, Vol 7 No 1, Spring 1969.  
Page, R & Cumming, W. Fleet - The Flying Years, Erin Ontario Canada: Boston Mills Press 1990  
Wingspan, Jan/Feb 1989.

Bill Devins (SAFCH #557), IPMS/USA Seaplane SIG, 107 Troy Hills Rd., Whippany NJ 07981, USA

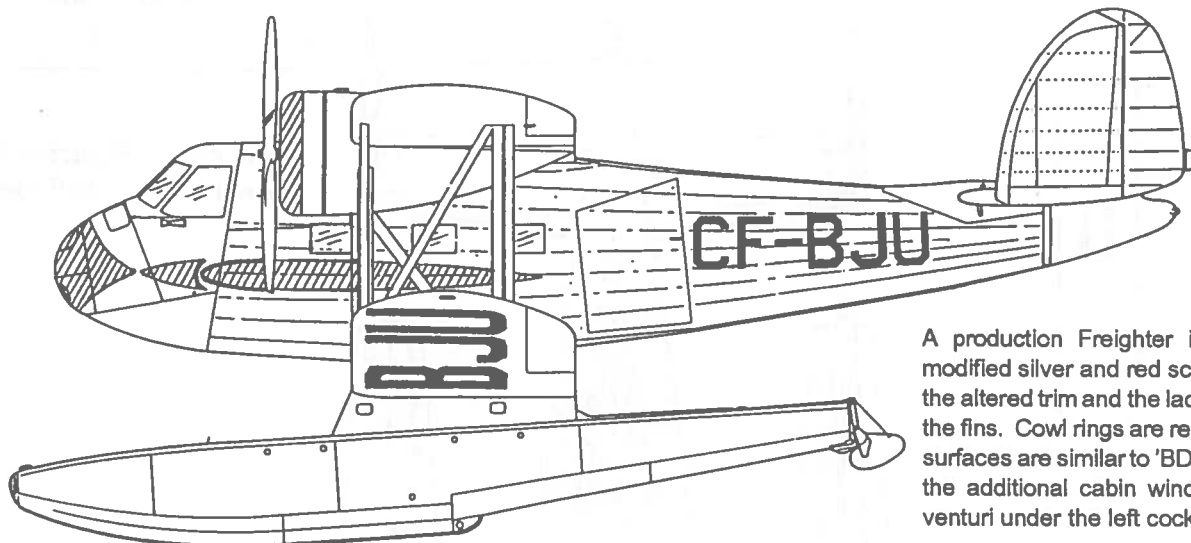
# FLEET FREIGHTER in PROFILE

by Bill Devins

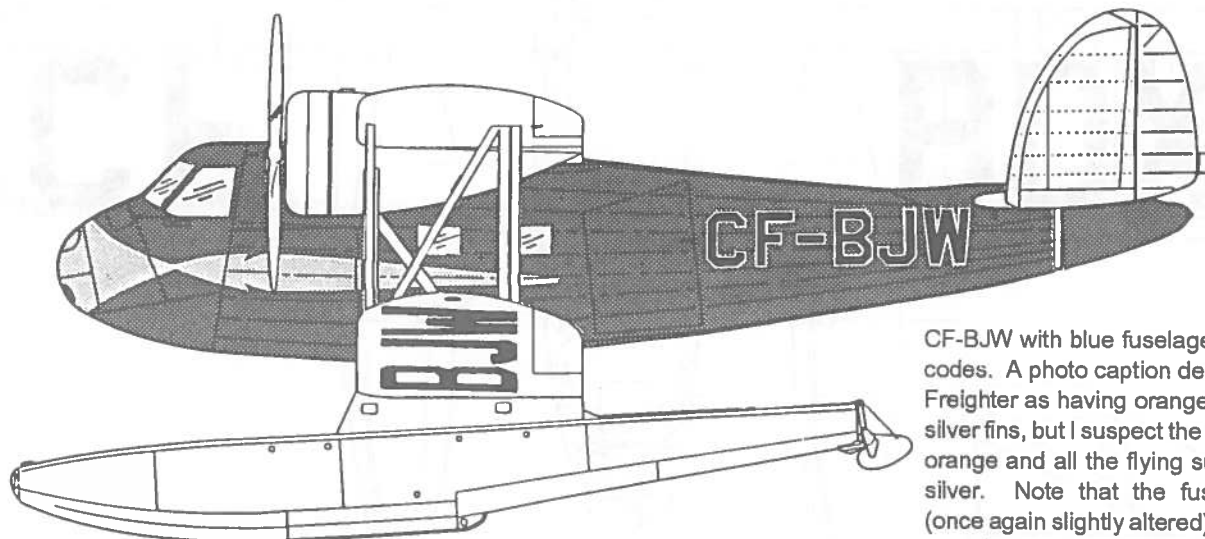
1/72 Scale



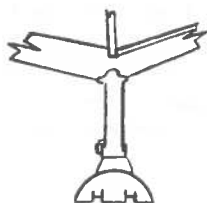
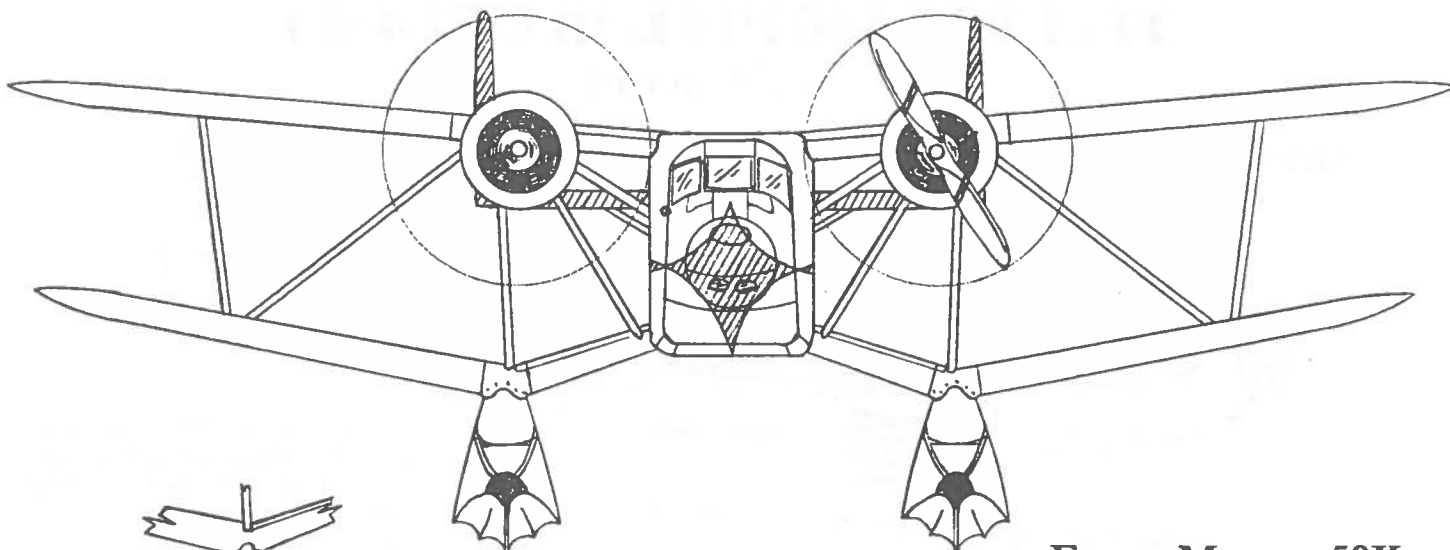
The prototype Fleet 50K, silver doped with black registrations and red trim, including fin leading edge; the front and upper views also show this scheme. Check the differences in the nose trim and fuselage flash on these three Freighters. Note venturi on right side.



A production Freighter in a slightly modified silver and red scheme. Note the altered trim and the lack of color on the fins. Cowl rings are red, and upper surfaces are similar to 'BDX'. Also note the additional cabin window and the venturi under the left cockpit window.

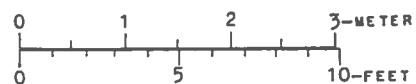


CF-BJW with blue fuselage and black codes. A photo caption describes this Freighter as having orange wings and silver fins, but I suspect the trim color is orange and all the flying surfaces are silver. Note that the fuselage trim (once again slightly altered) and codes are piped in white, or perhaps silver.

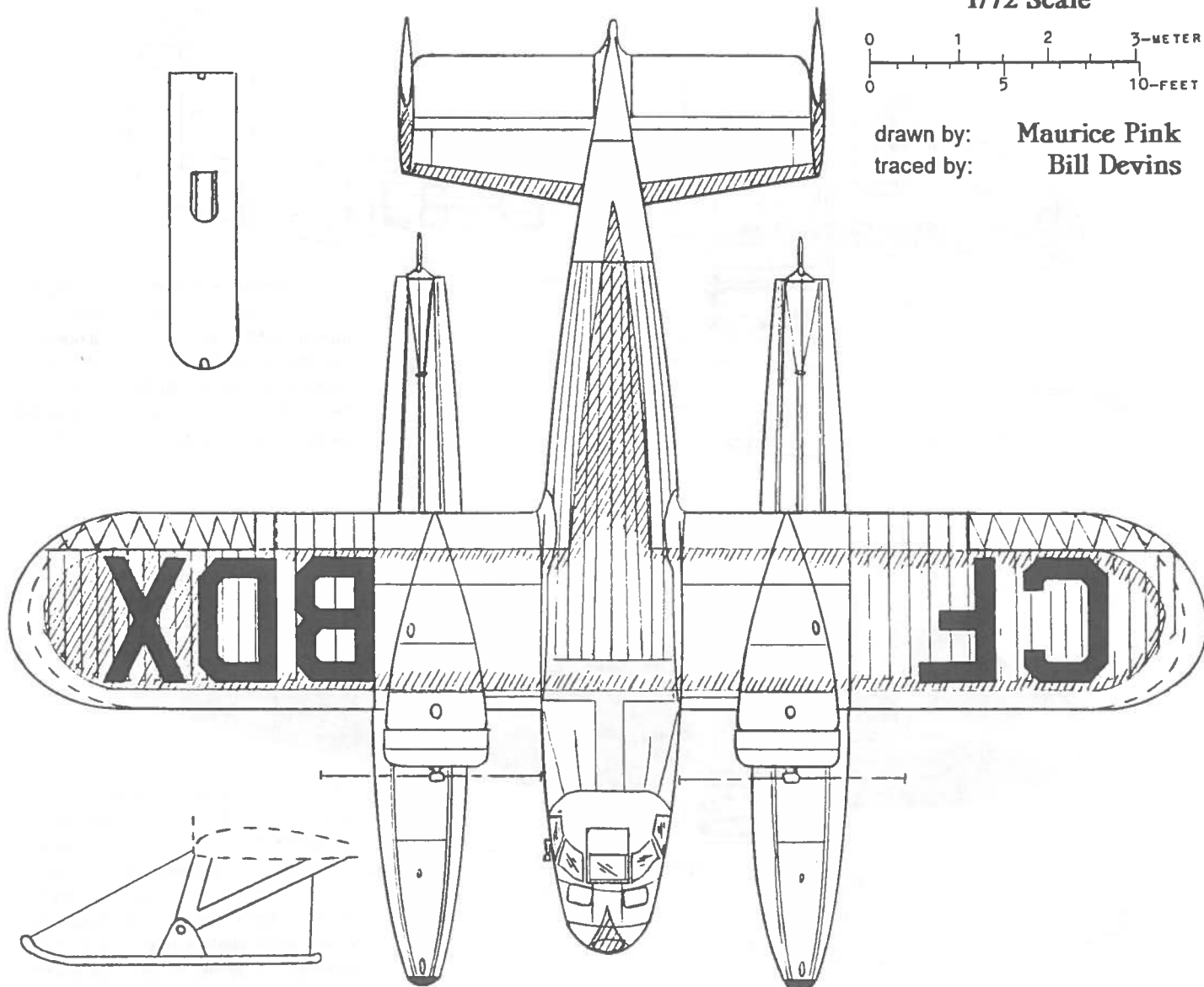


## FLEET MODEL 50K FREIGHTER

1/72 Scale



drawn by: **Maurice Pink**  
traced by: **Bill Devins**



# The Yugoslav Emils

Sid Napier © 1998

[Editor's note: This article first appeared in Mushroom Modelling Magazine and is reproduced here with the kind permission of the author. All rights to this article belong to the author and cannot be reprinted without the expressed consent of the author.]

In 1937 Yugoslav military aviation still consisted solely of auxiliary arms of the army and navy, both of which were equipped with obsolete 1920s era aircraft including Hawker Furies, Breguet XIXs, Potez 25s, Avia BH 33s, Ikarus 10s, Dornier Wal flying boats and Dornier Do 22 floatplanes. With international tension rising steadily, a decision was taken to set up an independent air force, the Jugoslovensko Kraljevsko Ratno Vazduhoplovstvo (JKRV or Yugoslav Royal Air Force) utilizing the army air force as a nucleus. By 1943, so the plan, the JKRV was to have nine regiments (pukovi) each puk to consist of three groups (grupe) and each grupa of three squadrons (eskadrile). It was to be equipped with 1068 modern aircraft, designed and built by the domestic aircraft industry or purchased abroad and/or licence-built, and backed by a reserve of 369 aircraft.

By early 1938, the JKRV had found that although the country's own aircraft industry had produced some IK-2s, comparable to the Polish PZL P-11, development of the Rogožarski IK-3, a fighter that promised to be as good as major nations' best, was lagging behind schedule. It had also become apparent that Yugoslavia did not rank as one of the international armament industry's most favoured customers. The JKRV consequently had to purchase what was available: Bristol Blenheim Mk Is, Hawker Hurricane Mk Is and Dornier Do 17Ks, all three of which would also be licence-built, and Savoia-Marchetti SM 79s. What was lacking, therefore, was a state-of-the-art fighter.

## The Me109

In late September 1937, a fighter commission of the Army Air Force Command had been sent to Germany to test and possibly initiate purchase of the Heinkel He 112. The members had returned to demand that the Messerschmitt Bf 109E-3 be acquired! At a meeting held on 20 December 1938 to discuss the equipment of the new air force, the commission's demand came up for review and led, according to AEROPLAN, to the decision, taken at the beginning of 1939, to acquire 100 Me109E-3s. (In Yugoslavia, the aircraft was, and is, always referred to as the "Me109" and not as the Bf 109 or "Emil".)

On 11 February 1939, the German air attaché in Beograd (Belgrade) reported that Reichsmarschall Hermann Göring had approved The sale of Bf 109Es to Yugoslavia, and on February 16 it was confirmed that the German aircraft industry would supply 100 Me109s, a credit of 120 million Reichsmark being extended. To demonstrate goodwill, Göring even authorized the delivery of five Me109s prior to The signing of The actual contract, these aircraft being ferried to Zemun airfield outside Beograd by German pilots on 18 August 1939.

The purchase of The Me109s having by then been covered, among other things, by the secret GermanYugoslav "protokol" of 5 October 1939, the actual contract with the Messerschmitt company was signed on October 23. (Some sources state that two separate contracts were actually signed, each for 50

Me109s.) The contract covered the purchase of 100 Me109E-3s for RM 16,900,000 and spare parts for an additional RM 2 million, with payment to be made in iron ore, chrome and copper. In terms of prewar dinars, this represented a price per Me109 of 2.5 million when the contract was signed and 3 million per aircraft by the time delivery was completed. According to AEROPLAN, this was 15% more than the price paid in hard currency by the Swiss for the same aircraft.

(Some authors claim that only 25 spare DB 601A engines were supplied and that after sales service was poor including the supply of ammunition for the Me109s' guns. However, Š.I. Oštric and Č.J. Janić report that 50 DB 601A engines were delivered together with the Me109Es and that, after the performance of a standard Hurricane Mk I had been enhanced by experimentally fitting a DB 601A, an IK-3 airframe was being modified to take a German engine. Furthermore, it is not clear why ammunition for the Me109s' 20-mm FF (Oerlikon) cannon and 7.92-mm MG 17s should have been in short supply. Both the IK-2 and IK-3 had an engine-mounted 20-mm Oerlikon cannon, all the IK-2s, IK-3s and Hurricane Mk Is had been re-armed or armed with 7.92-mm Brownings of Belgian manufacture, and the standard Yugoslav infantry rifle of the period was a 7.9-mm Mauser M-20 which was manufactured under licence by a state-owned factory at Kragujevac!)

The outbreak of World War 2 on 1 September 1939 played havoc with the agreed delivery schedule, resulting in constant reminders, protests and intervention by the Yugoslavs. It rapidly became evident that there was a certain lack of coordination between the Reichsluftfahrtministerium (RLM), Göring and the German aircraft industry.

The terms and provisions of the contract had stipulated that the first 43 Me109s were to be delivered in three batches in 1939, i.e. five in August (the prior-to-contract batch), 23 in October, and 15 in November/December. But only 39 had been delivered by the end of the year and 16 of these, having been delivered by rail, were not test flown by a factory pilot until 13 January 1940. Deliveries continued, if not on schedule, and by 26 February 1940 there were 50 Me109s at Beograd-Zemun airfield. By March 15, the JKRV had taken delivery of 64 Messerschmitts and its commission at the factory in Germany had reported that a further 21 were ready for acceptance checks and 15 were on the production line.

Just how many factory fresh Me109s were actually delivered is not clear. According to German sources, only 73 Me109s had been delivered to the JKRV by 1 May 1940 and the remaining 27 of the 100 originally ordered had not been delivered by 27 February 1941. Nonetheless, there are indications that the JKRV ultimately managed to acquire more than 73 Me109s. Some sources say an additional 15 were ferried in during the latter half of 1940 (which would have raised the total to 88), others hint that "action" taken sometime prior to March 1941 led to the acquisition of about 20 "used" Me109s which arrived in crates by rail. It should be noted that all the JKRV's Me109s had the early "rounded" E-3 type canopy and lacked both an armour glass windshield and head and shoulders armour.

Evidence for the acquisition of more than 73 Me 109s would appear to be provided by the ID number allocated to each individual aircraft. If the German figures are correct, the Me



IO9s should have been coded L-1 through L-73 (L = lovac = fighter), but photos show there was an L-80, L-81 and even an L-88! (In some cases the code numbers corresponded with the last two digits of the evidencijski broj or Werknummer, e.g. L-7 was 2507 and L-10 was 2510, but L-31 was 2530, L-33 was 2532 and L-52 was 2547.) Since the ID numbers were apparently applied in logical sequence as Me 109s were delivered or assembled and test flown, and the existence of an L-7, L-8 and L-10 precludes the allocation of the first 15 numbers to another aircraft type, the JKRv must initially have taken delivery of at least 88 Me109s although one, L-55, was reportedly lost en route.

In any case, by 27 February 1941 the Italian forces attempting to occupy Greece had suffered severe reverses, Yugoslavia was not only beset by internal unrest resulting from friction between ethnic groups but subject to German political pressure, and Hitler had initiated the planning of Operation Maritza to save Mussolini from disaster. The German 12th Army under Feldmarschall Wilhelm List and Fliegerkorps VIII under General Freiherr Wolfram von Richthofen were in Romania and preparing to cross the Danube next day.

On 17 March 1941, the Yugoslav government was requested by the Germans to fall in line and sign the Tripartite Pact. Subject to conditions that would preclude Yugoslavia participating in hostilities, the majority of Regent Prince Pavle's cabinet ministers, including prime minister D. Cvetković, seemed prepared to do so. The minority, three Serb ministers, resigned in protest on March 22.

The result was a German ultimatum of March 23 demanding that the Pact be signed by midnight that day. Hasty negotiations followed and the Pact was signed on March 25, one consideration apart from German pressure allegedly being the possible acquisition of Salonika. By this time, the German 12th Army was in position in Western Bulgaria and ready to invade Greece on April 1.

On 27 March 1941, General Dušan Simonović, Chief of the Air Staff; and other officers staged a coup d'état. The Cvetković government was ousted, Prince Pavle deposed, 17-year-old Prince Petar set on the throne, and the Pact repudiated.

Hitler's reaction to this setback to his plans, specifically the delay to the launch of Operation Barbarossa, his crusade against communism was the decision to teach Yugoslavia a lesson. The 2nd Army in Austria and Hungary, together with Luftflotte 4, was ordered to support the 12th Army. Italy was asked to invade Yugoslavia from northern Albania, and Romanian and Hungarian units were requested to support the German forces. Joint British and Greek diplomatic efforts to agree action with the Yugoslav government produced no worthwhile results in the prevailing chaos.

By this time Fliegerkorps VIII had 414 aircraft at its disposal, Luftflotte 4 another 576, and a further 168 were on call from Fliegerkorps X in Sicily. The Regia Aeronautica reportedly had 666 aircraft available.

Organization of the JKRv, initiated in late 1939, had not been completed until March 1941. Some 340 aircraft were on the strength of the fighter and bomber regiments, and

about 120 obsolete types were still being operated by army reconnaissance squadrons. The JKRv did have some 2000 trained pilots and enough aircrew but all lacked operational-type experience. The fighter pilots had seldom practised formation flying in more than twos or threes or together with other units and, due to a shortage of ammunition, had not had much

gunnery practice. Most aircraft lacked radio transmitters and receivers.

Very little flying time had apparently been accumulated on the real backbone of the fighter force, the Me109s. According to Dragisa Brasnović, some Fury pilots first had to log 10 hours on the "docile" Hurricane Mk I and 20 hours on the Messerschmitt Bf 108 4-seater before converting to the Me 109. As in other air forces introducing new fighters, unfamiliarity with retractable landing gear led to a fair number of training accidents.

Logistically, the JKRv's problems were also serious. It had 11 different types of operational aircraft, 14 different types of training aircraft, five different types of auxiliary aircraft, 22 different types of engines, four different types of machine-gun and two different types of aircraft cannon. For a major air force such a diversity of equipment may not be a problem, but for a small air force with a limited budget it creates difficulties in peace time and can be disastrous in war.

Because its main airfields were known to all potential enemies, the JKRv had been preparing some 100 auxiliary airfields. But only half of these were ready and in wet weather many were useless to all but light aircraft. Nonetheless, the JKRv was secretly mobilized and dispersal to auxiliary fields effected by March 20. Then, on April 3, a Major Vladimir Kren defected to Graz, Austria, in a Potez 25, taking with him information on dispersal fields, codes and ciphers. Hurried, and probably confusing, changes had to be made.

Meanwhile, violations of Yugoslav air space near Greece and Albania had kept JKRv fighters on constant alert and had led to the loss of a Me 109 in a crash landing and the death of the pilot. The 10 Me109s of 102 Eskadrila back at Beograd-Zemun from Mostar, were in need of an engine overhaul after five months patrol duties in the south.

## The April War

Operation Maritza, the "April War" as it is called in Yugoslavia, commenced at 0515 hours on 6 April 1941. On that morning, the JKRv, with headquarters at Ljesnica and under the command of Brigadni General Borivoje Mirković, had its Me 109s deployed as follows:

- 56 with the 1. Lovacka Brigada (1st fighter Brigade) whose 79 fighters were charged with the defence of the Vojvodina, Northern Serbia, Eastern Bosnia and Eastern Slavonia, the major centres in this area being Beograd, Kragujevac, Čačak, Kraljevo, and Kruševac.

- 2 with 702 Eskadrila (liaison) at Beograd-Zemun.

- 19 with 101 and 141 Eskadrile, 2 Puk, 31 Grupa at Susičko Polje, Kragujevac.

- 27 with 104 and 142 Eskadrile. 6 Puk, 32 Grupa, at Prnjavor in Srem.

- 10 with 192 Eskadrile, 6 Puk. 51 Grupa. at Beograd-Zemun.

- 3 with the Samostalna eskadrila lovacke škole (Independent Squadron, Fighter School) at Mostar-Kosor, together with three Hurricane Mk Is and three Avia BH 33s, two of which were on detachment at Podgorica in Montenegro. This nine-aircraft unit was tasked with the defence of the whole of Montenegro, Hercegovina and Dalmatia!

There were therefore 61 combat-ready Me109s available, indicating that 12 to 27 (or more?) were either undergoing overhauls or repairs, or had been written off.

In addition to the Me109s, the JKRv had 15 Hurricane Mk

Is of 163 and 164 Eskadrile, 2 Fighter Puk at Knić, and 20 Hurricane Mk Is of 105 and 106 Eskadrile, 33 Grupa, and 108 Eskadrila, 34 Grupa, at Bosanski Aleksandrovac near Banja Luka. There were also six Rogožarski IK-3s of 161 and 162 Eskadrile, 51 Grupa, at Beograd-Zemun; eight Ikarus IK-2s of 107 Eskadrila, 34 Grupa, at Bosanski Aleksandrovac, 15 Hawker Furies of 109 and 110 Eskadrile, 35 Grupa, at Kosačić near Leskovac, and another 15 Furies of 111 and 112 Eskadrile, 36 Grupa, at Rezanovačka Kosa near Kumanovo in Macedonia.

Fliegerkorps VIII's Bf 109Es, Ju 87s and Hs 123s were immediately active on April 6 in support of the German 12th Army's spearheads and against the JKRv's Mesovita Brigada (3rd Mixed Brigade) units defending southeast Yugoslavia. In accordance With Hitler's specific directive to punish the Yugoslavs for their refusal to cooperate, Luftflotte 4 launched a mass raid on Beograd. Reportedly, 74 Ju 87s, 160 He 111s, Do 17Zs, Bf 110s and 100 Bf 109Es were involved.

At 0645 hours on April 6, all of 51 Grupa's Me109s and six IK-3s were scrambled from Beograd-Zemun airfield together with 13 of 32 Grupa's Me 109s from Prnjavor. One IK-3 had to turn back with engine trouble. In the following engagement, 102 Eskadrila's Me109s claimed five kills and the IK-3s another five, but three Yugoslav fighters were shot down and six more destroyed or damaged in forced landings. Two Yugoslav pilots were killed, one being the commander of 102 Eskadrila, Kapetan Miloš Zunjić.

The 32 Grupa pilots claimed four kills for the loss of two of their own Me109s, but another had crash landed and more had been damaged. During the battle, the Yugoslav anti-aircraft batteries, being unable to distinguish between friendly and hostile Messerschmitt 109s, had fired at both!

The next raid on Beograd came at 1000 hours and was intercepted by the airworthy Me109s and IK-3s of 51 Grupa together with nine Me109s of 32 Grupa. The Yugoslavs claimed three kills, but lost two Me109s and had another two badly damaged. A patrol of 101 Eskadrila Me109s from Susičko Polje pursued the departing Ju 87s, Kapetan 218ivica Mitrović reportedly shooting down two before he was killed and his wingman shot down.

Two afternoon raids on Beograd, the first at 1400 hours, were met by six 51 Grupa and twelve 32 Grupa fighters who claimed one and three kills respectively. Three 32 Grupa Me109s were shot down, two pilots being killed. Minor raids continued into the night.

At the end of the day, the air battles over Beograd had cost The 6th Fighter Puk five pilots killed and seven wounded, eight aircraft shot down and 15 damaged. Two

2nd Puk Me109s had also been lost. The Yugoslavs claimed 22 Luftwaffe aircraft shot down and two more forced to land. The actual Luftwaffe losses totalled two Do 17Zs, five Bf 110s plus one crash-landed, four Ju 87s and a Bf109E. Luftwaffe kill claims over Beograd totalled 19 Me109s and four unidentified aircraft.

Meanwhile, also on April 6, 2nd Puk Me109s and Hurricanes (from 52 Grupa) had flown many patrols in the sector between Cacak-Kraljevo-Kragujevac and Paraćin. They had seen little action except for a 31 Grupa Me109 which had shot down a Hs 126 near Paraćin.

In the west, where the air defence of the whole area rested on the nine fighters of the Independent Fighter Eskadrila, Regia Aeronautica reconnaissance aircraft and bombers, supported

by Fliegerkorps X units from Sicily, had been active from 0630 hours. Mostar, Split, and the arsenals at Tivat and Zelenika in the Boka Kotarska were bombed, and Podgorica airfield was strafed. The two Avia BH 33s at Podgorica were both shot down within 10 minutes, being claimed Furies.

The Me109s and Hurricanes from Mostar intercepted 10 CANT Z1007bis bombers attacking Mostar soon after midday, a Me109 pilot shooting down one Italian machine.

Later in the day, a Me109 pilot claimed a twin-engine Luftwaffe aircraft. Two Me109s were damaged. In all, JKRv fighters flew 377 sorties on April 6, 47 being lost and others damaged.

On April 7, Yugoslav fighters were unable to provide adequate protection from Luftwaffe and Regia Aeronautica raids. Six 35 Grupa Hawker Furies took off from Bojnik in an attempt to intercept German bombers, but none was able to catch the faster German aircraft. The surviving fighters of the 6th Puk were engaged throughout the day over Beograd, no massed raids being encountered. Some pilots made up to eight scrambles. Several kills were claimed without loss but with combat damage.

The major air battle of the day took place when nine 32 Grupa Me109s engaged Ju 87s bombing the railway installations at Krušedol, claiming three Stukas shot down. But the Yugoslavs were bounced by Bf 109Es of 4/JG 54 who shot down or severely damaged eight Me109s. Luftwaffe claims for the day included a further three Me109s as well as three Hurricanes, two IK-3s and a "PZL."

To evade an anticipated Luftwaffe strike on Prnjavor airfield, the surviving airworthy Me109s of 32 Grupa were moved to Veliki Radinci near Ruma, four in the evening of

April 7 and five next morning. One crash landed. They were joined by three Me109s and three IK-3s of 51 Grupa. Me109s of the 2nd Puk patrolling over Central Serbia on

April 7 encountered only two Hs 126s, one of which was shot down.

By the evening of April 7, the JKRv had lost almost 60 percent of its operational aircraft in 48 hours. And it had begun to rain and snow.

On April 8, the 6th Puk's remaining Me109s and IK3s were joined at Veliki Radinci by five Hurricanes of 105 Eskadrila, 4 Puk, from Bosanski Aleksandrovac. The Me109s of 31 Grupa at Knić, Kragujevac, were literally stuck in the mud of the waterlogged airfield. The Hurricanes of 52 Grupa's 163 and 164 Eskadrile like the Furies of 35 Grupa strafed German troops. Hurricanes of 4 Puk engaged Luftwaffe fighters over northern Croatia and Slovenia.

On April 9, the Me109s of 31 Grupa remained grounded by mud, as were now 52 Grupa's Hurricanes at Knić. Only the Furies at Bojnik and Kosačić were able to take off and were fired on by Yugoslav troops!

Towards evening rumours that German forces were nearing Kragujevac prompted 31 Grupa personnel to burn all their grounded Me109s. They subsequently learned that German forces were still more than 60 km away.

On April 10, the 14th Panzer Division occupied Zagreb and a new independent state of Croatia was proclaimed under the rule of Ante Pavelić, the head of the Ustaša. Yugoslav ground units facing German forces were in full retreat and no requests were made for JKRv support. The 6th Puk fighters remained grounded at Veliki Radinci, only the 105 Eskadrila Hurricanes managing to take off and skirmish with Luftwaffe units.

On April 11, JKR V fighters flew 31 sorties, but the 6th Puk was not even notified of raids on Beograd. At Veliki Radinci two Me109s were destroyed by strafing Luftwaffe fighters: In the morning of April 12, the JKR V still had 41 fighters at its disposal but only 14 sorties were flown. At Veliki Radinci, ground crews burned the 6th Puk's last eight Me109s and three IK-3s together with two or three of the five Hurricanes of 105 Eskadrila. The remaining Hurricanes were flown to Bijeljina, where the JKR V was trying to regroup. But that airfield was strafed by Bf 110s, after which the only operational aircraft still airworthy were a single Hurricane and two Blenheims. At Mostar, Luftwaffe bombers attacking the airfield were intercepted by one of the Independent Eskadrila's last two fighters, a Hurricane which was shot down. The other, the JKR V's last Me109, failed to make contact. It was destroyed on the ground next day by strafing Italian fighters.

On April 12/13, German forces occupied Beograd. On April 13, eight sorties were flown by Hurricanes. Furies of 35 Grupa being relocated to Nikšić encountered Italian fighters en route and losses were sustained on both sides.

On April 14, Bijeljina airfield was taken by German troops who landed in Ju 52s. Meanwhile, about 130 JKR V aircraft, including one Hurricane and some seven Furies, were assembled on Kapiro Polje airfield near Nikšić and King Petar II was flown to Greece in a 7th Puk Savoias-Marchetti SM 79. The last flyable Hurricane clashed with Italian fighters and although damaged remained airworthy.

On April 15, the Yugoslav Commander in Chief ordered that Axis aircraft were no longer to be fired on and the evacuation of VIPs by airlift to northern Greece was

initiated. On April 16, the last Hurricane's pilot attempted to fly to Greece. Foul weather forced him to turn back and abandon the aircraft.

On April 17, the Yugoslavs surrendered and the April War ended - soon to be superseded by the horrors, devastation and fratricidal strife of the partisan war.

Photos show that, in addition to other aircraft, a Zmaj-built Hurricane and Furies Nos.45 and 53 were seized and tested by the Regia Aeronautica. The other Axis forces also captured and subsequently used various JKR V aircraft, including Do 17K bombers. No Me109 was apparently seized and later operated by any Axis air force except, perhaps, in the form of cannibalized parts.

### Camouflage and Markings

The majority opinion is that all the JKR V's Me109E-3s had their upper surfaces, including the spinner and propeller blades, painted RLM 70 Schwarzgrün. The undersurfaces were painted RLM 65 Hellblau. The paint had a semi-gloss finish on metal but looked matt on fabric and was matt on the backs of the propeller blades.

There are photos on which ME109s look as though the upper surfaces were painted RLM 71 Dunkelgrün and others on which they look as though they might be wearing the standard Luftwaffe RLM 70/71 upper surface camouflage of the period, but Yugoslav sources assure that neither was the case. A possible exception may have been L-55, which crashed near Regensburg while being ferried to Yugoslavia. L-55 reportedly had over-painted German insignia and, therefore, may have wore RLM 70/71/65 camouflage.

The national insignia, the Kosovski kri ž (Kosovo Cross), was

initially applied in four positions on the wings (e.g. L-26 and L-52, July 1940). The number of roundels was subsequently reduced in two stages to one under the starboard wing and another on top of the port wing, the roundel on top of the starboard wing being the first to be painted over. As a result each Me109 apparently wore three roundels at one or another point in time (e.g. L-31 in April 1940 and L-80 in September 1940).

The fuselage code, an "L" followed by a hyphen and the individual aircraft's ID number, was usually black. The exceptions included L-26, which had the entire code in white, and L-8 and L-33, which had only the digits in white. L-26 was flown by a Kapetan Klavora, L-33 by the deputy commandant of 31 Grupa, Major Dragutin Zivanović.

Most Me109s seen to have had a small black serial number just behind the code, some on both sides, some only on the port side. But L-80 had none. The size of the zastava (flag) on the rudder varied. On some Me109s it covered the entire rudder (e.g. L-8, L-26, L-80), on others it was just a narrow band (e.g. L-10) and on others it was missing altogether (e.g. L-7, L-31, L-33, L-52).

Many Me109s had the make and type, serial number and weight data shown in black and one on top of the other, on the port side of the fin, e.g. L-7 had

Me109  
Br. 2507  
T.S. 1835Kg  
T.K. 775Kg  
T.U. 2610Kg

L-80 had no inscription on the fin.

Some Me109s had the wing root walkways painted black, e.g. L-80 on both sides and L-26 on the port wing only, the black paint covering the area delineated by red lines on

Luftwaffe Bf109Es. But L-10, L-31 and L-52 did not have black walkways.

### References

1. AEROPLAN 6/89. Meseršmit Me-109E, 1 Deo, p.2129.
2. Christopher Shores & Brian Cull with Nicola Malizia, "Air War for Yugoslavia, Greece and Crete, 1940-41", p.169-239.
3. Vladimir Ristić, Air Combat over Yugoslavia - April 1941. SAFO Vol 19 No. 4 (76), p.114-116.
4. Dragisa Brasnović, Emils over Yugoslavia, Scale Models International. August 1984, p.430-435.
5. Sime I. Oštrić & Čedomir J. Janić, IK Fighters (Yugoslavia: 1930-40s), Aircraft Profile 242, p.186.

### Kits

If your chosen scale is 1/48 all you need do is pick the appropriate Hasegawa Emil. Just bear in mind that JKR V Me109s had the early type "rounded top" canopy no armour glass windshields and no head and shoulders armour.

If your preferred scale is 1/72 you have the usual problem: all the Bf109E kits currently available are curate's eggs.

Hasegawa's 1/72 Emil would be fine if the fuselage profile was right, the fin/rudder and tailwheel were the right size, the wing radiators the right shape, and the cannon magazine bulges bigger.

The Airfix Emil's overall size and shape are fine except for the overdone detail (rivets!). BUT the cockpit is too long and too far back, bare of detail except for a floor, an instrument panel, and a seat into which the pilot figure will not fit. The

canopy sits too low on the cockpit sides, its shrivelled quarter lights curl in and have to be replaced or filled with Kristal Kleer, and it has the square E-4 type top. (The Hasegawa canopy would fit nicely if the cockpit were shortened!) Moreover, the oil cooler has to be blanked off, the wheel wells have to be boxed in and detailed, the trailing edges of all the flying surfaces, especially the wings are thick; and there are no aileron mass balances. (You would think that, having the most accurate shape, Airfix would by now be trying to stay ahead by offering both abetter and an alternative canopy and an extra sprue with aileron balances, cockpit detail and a quickfix part for the oil cooler.)

Matchbox's Bf 109E is fine as regards shape, but the cockpit is bare except for an impossible seat, the oil cooler is solid and needs opening up, the wheel wells need boxing in and detailing, the small air intake under the nose is missing, there are no aileron mass balances, and the spinner is a rather unhappy shape. The kit does offer separate exhaust stacks and the canopy is good but of the E-4 type.

Heller's E-3 is slightly underscale but offers more detail than the Airfix kit. It was available, and was assembled making the following modifications: The nose was lengthened 1mm by adding a "retracted" wheel from a Matchbox kit and using Milliput to correct the profile, the small under-nose air intake being relocated farther forward. The oil cooler was blanked off. The exaggerated edges of the cowl gun troughs were sanded down. The trestle/handling holes in the tail (represented by raised rings) were drilled a frame farther back. The gunsight of opaque (!) plastic was discarded and a new one made, the "glass" being

attached to the windshield with gloss lacquer. The square seat back was rounded to a shape more like that shown in photos. The "alternative" canopy proved to be the E-4 type with the frames positioned as for the early E-3 type. As it was pretty thick, the three separate parts were joined and anchored to the fuselage with epoxy adhesive, then sanded to E-3 profile and polished. The radio mast was moved forward to the proper position and the aerial attachment point on the fin reshaped. The wheel wells were boxed in and detailed. The aileron trim tabs were removed and replaced farther outboard with new ones of the right shape cut from thin card. The wing radiator fairings attached to the flaps were built up with 0.5mm card and reprofiled. The intake supports/FO bars were thinned down. The wing-to-fuselage joint was not too good but bits of card, Green Stuff and sanding solved the problem.

#### Details and decals

The code can be made up from the spare decals box and black or white decal sheet. The shape of some of the digits may present problems. For a 1/72nd scale model, the code should be about 7mm high and the serial number 1mm.

The Kosovski križ wing markings should be about 10 mm in diameter. No decals seem to be available, so I used "dry decals" printed on thin adhesive paper which came from the Rogož arski IK-3 resin kit made by Aeropoly in Zrenjanin, Serbia.

Sid Napier (SAFCH #1521), Burgstrasse 2, CH-4170 Ettingen, Switzerland.

"El 'Tovarishch' Kazakov": Continued from page 45.

mission on enemy positions around the Hermitage de Santa Quiteria, the first three Chatos experienced engine malfunctions. Salas, p.194 note #2, writes "Estos aviones de la escuadrilla de R. Alonso Santamaria, no salieron porque a los tres primeros en intentarlo se le incendi el motor en la carrera de despque. La investigacion de las averias la dirigi Kosakov." But in "Duelo Aereo Sobre Teruel" in *Alas Gloriosas* #25, p.22, Juan Comas Borrás, a member of Santamaria's escuadrilla, claims the aircraft in question belonged to the Kosakov escuadrilla.

31. Osadchii, p.175.

32. Tinker, p.176.

33. *ibid*, p.176. There must have been two squadron there when Tinker landed, as Santamaria's escuadrilla was also there according to Comas *op. cit.* p.23.

34. Tinker, p.179.

35. *ibid*, p.222.

36. Salas, p.194. Tinker p.178 says "each patrol managed to shoot down one of the other sides planes". Baumler in his *Flight Log* only mentions "41637 Pilot from South America missing".

37. Tinker p.178.

38. Comas p.23, but Tuya had been KIA the day before.

39. Osadchii pp.175-6. Could this first Heinkel be the same one which Baumler first shot up but did not see crash? I must also say that I believe Osadchii is sometimes a little confused in his memoir written apparently in the 1970s as he says, among other things, that on the same day as this battle, Smushkevich informed him that Ptukhin had replaced Pumpur, (which did not happen until the end of May) and "I would turn over my escuadrilla to

Lacalle" which did not happen. Comas p.24 says Calvo was the right point in the patrulla of Victor(?).

40. Salas, pp.195-196 and Comas p.24. On the other hand, Tinker p.185 claims five Heinkels were downed on the Republican side and three more were seen to crash on their own side. Baumler in his *Flight Log* wrote "Alfonzo Cabo killed in collision with enemy Heinkel." The name Calvo is from Tinker and also used by Comas and Laureau.

41. Puzeikin, p.145.

42. Tinker, p.207.

43. Tinker, p.222.

44. Osadchii, pp.176-177.

45. Osadchii, p.177.

46. Tinker, p.237.

47. Tinker, p.238, but Salas, p.219 says that the force which intercepted them on both their third and fourth missions was two squadrons of Fiats of the Aviazione Legionaria under Nobili and Larsimont. See also Finick p.92.

48. Puzeikin, p.155.

49. Osadchii, pp.179-180.

50. *Aviatsiia i Kosmonavtika CCCP*, (Ministerstva Oborony CCCP - Defense Ministry), Moscow 1968, List of HSU's given to aviation personnel p.555. Strangely this list does not include Pavel Rychagov who was awarded the Gold Star for service in Spain.

Send any additions and or corrections to Paul Whelan (SAFCH #\*), 97 James St., Bloomfield, NJ 07003, USA.

## Paraguayan Military Cessna 337/401/402

Antonio Luis Sapienza

**Cessna 337RG Skymaster:** A Skymaster was locally acquired by the FAP in 1973 for the Transport and Training Air Group (GAET) for aerial photography duties. Special cameras were installed in the aircraft for aerial mapping. The plane, c/n 337-01656, was serialised 0019. In 1980, this Skymaster was reserialised as FAP 0206, and in 1988 it was transferred to the Special Transport Air Group (GATE). The aircraft was maintained in pristine conditions for almost 20 years. Sadly, this Skymaster was completely destroyed by fire while being refuelled at Nu-Guazu AFB in 1992. Its last color scheme was the GATE standard one: overall gloss white with two red cheatlines along the fuselage. The Paraguayan flag colors were painted in the rudder with a yellow star in the white stripe. The FAP roundels were painted in two wing positions: upper left and lower right with the serial in opposite positions. The serial was also painted in black square numbers on the vertical stabilizers. The wing tips were red.

**Cessna 401:** Two 401s saw military service in the Paraguayan Naval Aviation (ANP). The first one, c/n 401-0217 was a model 401B and was acquired from the local market in 1984. Its previous identity was ZP-PGF, ex-N7998Q, which was originally registered in Paraguay in 1972. The military serial reserved for this plane was NAVAL 401, but for some reason, it was never painted on the aircraft, which kept the original civil registration. It was severely damaged in a belly landing in the Chaco Region when the landing gear failed to open in mid-1986. The plane could not be repaired and it was abandoned. It was painted in overall gloss white with red and black striping. The civil registration was painted in black letters on the vertical stabilizer and in two wing position (upper right and below left). A tiny Paraguayan flag was painted in the rudder and it received no military markings at all.

A second example was acquired by the ANP in 1996. It has the serial NAVAL 146 (c/n 401-0132) and it is a model 401A. Its previous identity was LV-AZJ. It was assigned to the General Purpose Air Naval Group (GAPROGEN) and its base is the ANP hangar at Asuncion International Airport. It is painted in overall gloss white with red and black striping. No black anchors were painted in the wings. A tiny Paraguayan flag is painted on the upper part of the vertical stabilizer. The serial is painted on both sides of the rear fuselage, under the striping in black

numbers and letters.

**Cessna 402:** Two 402s have been in military service in the FAP. Both were imported new from the factory through a local dealer for the Transport and Training Air Group (GAET) in 1978:

FAP 0221: (c/n 402-1360), a model 402B which was originally registered as 0021 and a few months later as T-0021. In 1980, it was reserialised as 0221 and in 1988 it was transferred to the GATE. It is being used as a VIP transport by the FAP and it is painted in the GATE standard color scheme. It is sometimes used for aerial photography with cameras mounted when necessary. When flying in this kind of missions, this aircraft is assigned to the Aerial Mapping Group (GAF).

FAP 0222: (c/n 402-052), a model 402C which was originally registered as 0023 and a few months later as T-0023. In 1980, it was reserialised as 0222 and in 1988 it was transferred to the GATE. It is also used as a VIP transport and it is painted in the standard GATE color scheme.

**Acknowledgements:** The author would like to thank Capt. P.A.M. Liduvino Vielman and Capt. P.A.M. Diego Galvan, ex-GATE pilots for the information on the FAP 337 and 402s, as well as Capt. Navy Pablo Osorio for the information on the ANP 401s. Thanks are also extended to the FAP and ANP for the permission to take pictures of the aircraft.

Antonio Luis Sapienza (SAFCH #1160), Casilla de Correo N#2721, Asuncion, Paraguay.

Photos on page 38. (All photos by the author except as noted)  
a-b. Cessna 337RG Skymaster '0206': GATE/FAP. 1991. Asuncion International Airport.

c. Cessna 401B, Paraguayan Naval Aviation (ANP) 'ZP-PGF'. Asuncion International Airport, 1984. (Daniel Romero)

d. Cessna 401A, GAPROGEN/ANP 'NAVAL 146'. Asuncion International Airport, 1996.

e. Cessna 402B, GATE/PAF '0221'. Nu-Guazu AFB, 1989. (Peter Steinemann)

f. Cessna 402B, GATE/FAP '0221'. Nu-Guazu AFB, 1992.

g. Cessna 402C, GATE/FAP '0222'. Nu-Guazu AFB 1989 (Peter Steinemann)

## Brazilian Navy North American T-28-R1

Marcos Vinicius G. Teixeira.

The Hamilton Aircraft Company, Tucson, AZ, produced a T-28A modification called the T-28R Nomair. In 1962, six T-28R1 (military version) were sent to Brazil equipped with hooks for carrier landing and powered by the 1350-hp Wright R-1820-56A engine. These six airplanes were numbered N-701 through N-706 by the Brazilian Navy Air Branch. The Brazilian T-28s were used for training naval pilot in the art of carrier landing, as well as for gunnery training against ground and towed floating targets. The aircraft carrier used was the recently restored and updated Minas Gerais (former HMS Vengeance). When not in service on the aircraft carrier, these airplanes were based in Sao Pedro de Aldeia Navy Base (Rio de Janeiro State). While in

service for Brazilian Navy, the T-28's belonged to the 1st Support Squadron, and were used during the 1964 Military Revolution to defend their base.

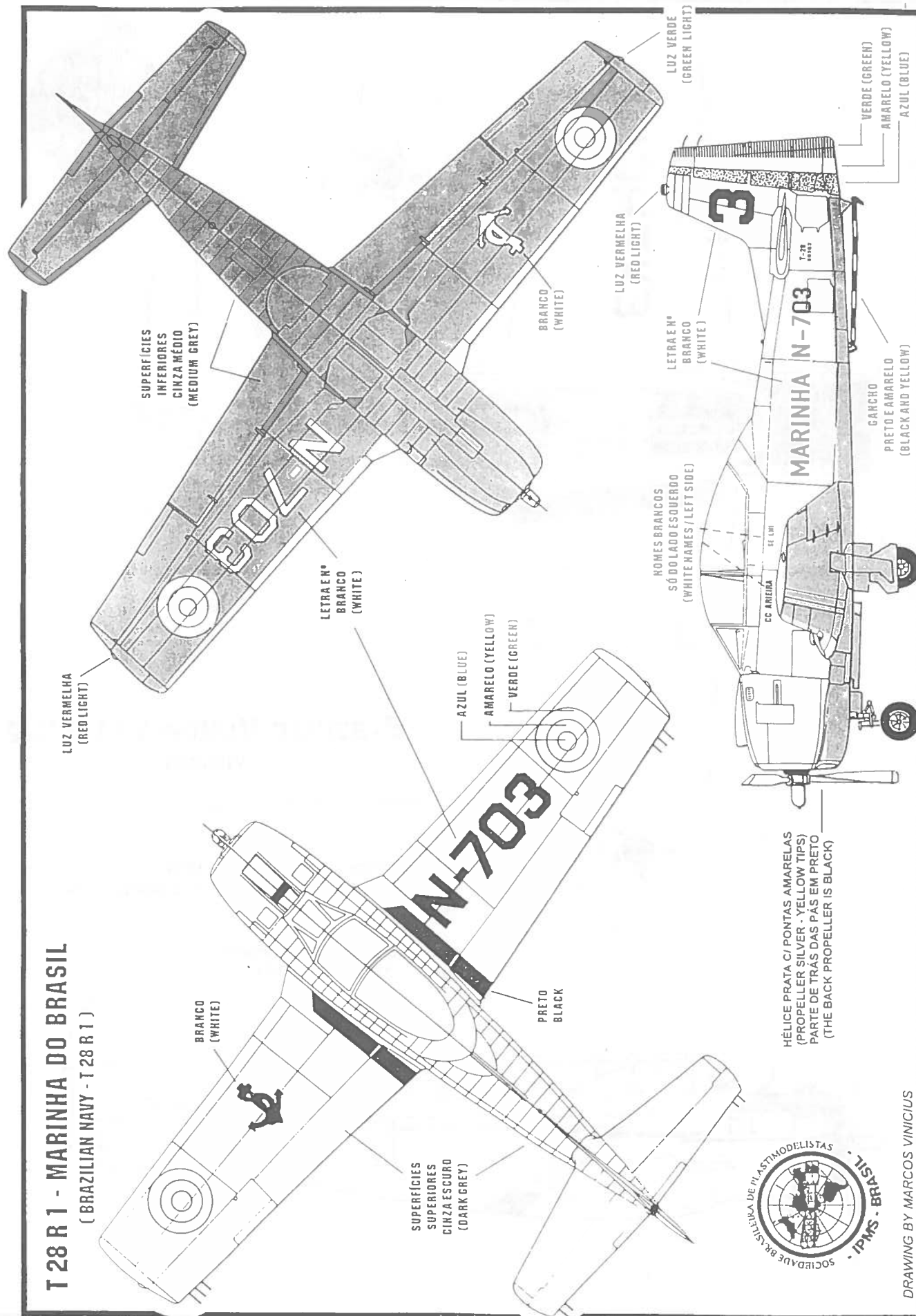
On September 3rd, 1965, the remaining five T-28's (N-702 fell into the sea in 1964) were transferred to the Brazilian Air Force and joined the 2nd ELO (Observation and Liaison Squadron). They were renumbered 0861 through 0865, repainted yellow and blue, and sent to Santa Cruz Air Force Base in Rio de Janeiro State.

This article is reprinted from the April/June 1997 issue of *Revista* with the kind permission of IPMS-Brasil.



# T28 R1 - MARINHA DO BRASIL

(BRAZILIAN NAVY - T28 R1)



DRAWING BY MARCOS VINICIUS

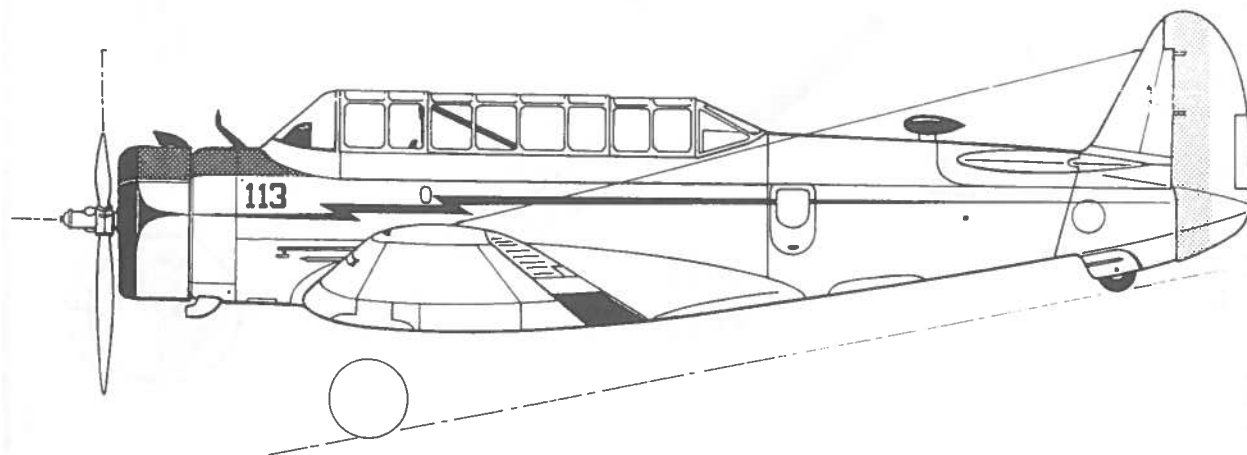


## Brazilian Vultee V11 GB-2 "Vultizao"

Drawings by Jonathan Thompson

Aviaco Militar (105-130) 1939-1941  
Forca Aerea Brasileira (B-VII 5000-5025) 1941-1948

Reference: Aviacao Militar Brasileira 1916-1984  
Francisco C. Pereira



# IDF/AF S-58 Identities

Lennart Lundh

Further to John Hayles' articles on IDF/AF squadrons, I offer the following identification of the Sikorsky S-58s used in Israel. The information here is based on Sikorsky allocation lists for the type; American, British, Canadian and Danish civil aircraft registers; FAA Type Data Certificate 1H11; *Rotor Roster*; *Warplane No. 68*; and Siegfried Wache's F-40 publication on the H-34 in German service. Unfortunately, I can't contribute any matches of IDF/AF serials to the following airframes.

The first three S-58s delivered are readily identifiable. While Sikorsky allocation lists show the following as S-58B airframes, it is possible they were actually H-34As. The Canadian Choctaws, for example, are listed as S-58s but were equipped as H-34As; there are substantial differences. This is not unusual, as the Sikorsky list for the H-19 shows nearly every airframe delivered for foreign military use as an S-55.

## C/N Delivered Comments

437 2-12-58 shown on Sikorsky allocation list as "S-58B, Israeli Government"; converted by Sikorsky to S-58BT, and delivered to Okanagan Helicopters as CF-OKE on 5-19-71; retired 10-2-78

691 2-14-58 shown on Sikorsky allocation list as "S-58B, Israeli Government #2"

692 2-11-58 shown on Sikorsky allocation list as "S-58B, Israeli Government #3"; converted by Sikorsky to S-58BT, and delivered to Okanagan Helicopters as CF-OKG on 5-28-71; Transport Canada shows exported to US 2-25-80; registered to Aris Helicopters as S-58B N94AH from 6-85 to 7-88

Of the four S-58Bs John states were received next, only three are currently identified. Carried as an S-58 and two H-34As on Sikorsky allocation lists, it is unlikely that they were S-58Bs. (Yes, S-58/H-34 designations are a nightmare!)

## C/N Delivered Comments

279 5-8-56 shown on Sikorsky allocation list as "S-58, Sikorsky demonstrator, N740A"; also shown with 4-6-60 delivery date, which is consistent with the delivery of ship numbers 1167 and 1186 to Israel; FAA paper records show service in Israel from 8-20-70 to 3-23-72 (the dates seem unlikely); converted to S-58E, and registered N4371S, by Carson Helicopter

1167 4-6-60 shown on Sikorsky allocation list as "H-34A, Israel #1"; subsequently registered to Sikorsky as N4374S

1186 4-6-60 shown on Sikorsky allocation list as "H-34A Israel #2"; converted to S-58JT by Utility Helicopter; registered N4375S for Cordon International and Trans Union Leasing as an S-58FT

A possible fit for the fourth "S-58B" was produced for civil use but absent from the U.S. registers during the '60s. This ID is purely conjectural.

## C/N Delivered Comments

403 11-29-56 shown on Sikorsky allocation list as "S-58B, A-F Helicopters #2", with no registration; subsequently N886X for Harry Doan and MacArthur Leasing

The identities of the twenty-four "ex-German" aircraft are clear, although two H-34s have been wrongly identified as being part

of this group. The Sikorsky allocation lists show the following as "CH-34A, German Army", but their absence from German lists of the H-34G.III is evidence that they are the helicopters used by the IDF/AF. With one exception, this is supported by the list in *Warplane No. 68*. A former Sikorsky employee relates that the Israeli H-34s were separated en route from the aircraft delivered to Germany, which makes it unlikely that they actually saw German service despite supposedly being built for that country. The assignment of a BuNo reflects their hybrid nature, the H-34G.IIIs being airframes meant for Navy HSS-1Ns but equipped as CH-34Cs. (As part of the problem in gathering data on Israeli Choctaws, the type in IDF/AF service was lumped under the S-58 designation. The Air Attache to Washington was told by his contacts that the H-34 wasn't used!)

C/N	S/N	Delivered	Comments
1549	150756	11-21-62	
1550	150757	11-21-62	
1551	150758	11-21-62	converted to S-58E by Orlando Helicopter; registered to Midwest Helicopter as N4388S, variously as an S-58ET or S-58JT
1552	150759	11-21-62	registered to Briles as N4389S, variously as an S-58, S-58B, or S-58ET on the Sikorsky allocation list; not in <i>Warplane No. 68</i> , but also not in the F-40 list of German H-34s
1595	150776	3-8-63	converted by Sikorsky to S-58ET; delivered to Brazil as PT-HFU 11-26-73
1606	150778	3-27-63	converted to S-58E by Helicopter Minit Men; delivered to Chicago Helicopter as S-58T; registered to Helicopter Minit Men as N4377S; to Nahanni Helicopter in 1979 as S-58E C-GRJD, transferred to Union Helicopter
1607	150779	4-9-63	converted to S-58T by Sikorsky for Cordon International
1612	150780	4-9-63	converted to S-58ET by Sikorsky; delivered to Brazil as PT-HFV 11-29-73
1613	150781	4-9-63	converted to S-58T by Sikorsky for Cordon International
1614	150782	4-9-63	converted to S-58ET by Sikorsky; delivered to Brazil as PT-HFW 11-23-73
1624	150783	5-1-63	
1625	150784	5-1-63	
1626	150785	5-1-63	converted to S-58T by Sikorsky; N4381S for Cordon International; G-BBJS for R.E. Dodds 9-19 thru 9-25-73; in Norway 9-25 73 thru 3-8-78; G-BBJS for Management Aviation 3-8-78 thru 5-30-79; LN-OSC for A/S Helilift, Norway from 5-30-79; EC-DJN for Helicsa Helicopteros, Spain
1627	150786	5-6-63	converted to S-58E by Olympic Helicopters; registered N4382S for Olympic Leasing; to Nahanni Helicopter for spares
1636	150787	5-6-63	
1637	150788	5-27-63	converted to S-58ET by Sikorsky; delivered to Brazil as PT-HFW 11-23-73
1638	150789	5-13-63	
1639	150790	5-27-63	Converted to S-58ET by Sikorsky; delivered to Brazil as PT-HFX 11-26-73
1646	150791	5-27-63	converted to S-58ET by Sikorsky; to Ontario Hydro as CF-OIA, C-FOIA 6-9-72; "exported 6-24-91"
1647	150792	5-27-63	
1648	150793	6-10-63	converted to S-58E by Western Helicopter, which used it as N4386S to Aris Helicopter as N2691L
1649	150794	7-1-63	
1656	150795	7-1-63	
1657	150796	7-8-63	converted to S-58ET by Sikorsky;

*Warplane No. 68* gives the following as an IDF/AF H-34, but its appearance in the F-40 serial list for German-used H-34G.IIIs makes this unlikely.

C/N	S/N	Delivered	Comments
1658	150797	7-8-63	F-40 shows successive German serials of QC + 461, PY + 344 and 80 + 99; later registered N82844 with United Aircraft; S-58ET G-BCLO for British Airways Helicopter 8-15-76 thru 6-4-80, Aviation Furnishings 6-25-80 thru 2-12-81; OD-AGL in Lebanon from 2-12-81

The Danish CAA states that the following aircraft is ex-IDF/AF. Since the Sikorsky allocation list shows this as "UH-34D, USMC" (unlike the notation for "German" airframes), this is unlikely.

C/N	S/N	Delivered	Comments
1659	150257	6-20-63 +	surplused from Davis-Monthan; converted to S-58ET by Sikorsky; OY-HAR for Gronlandsfly 3-27-73 thru 7-17-77; possible US N4391S and/or N2295W

As a final note, the "ex-German" aircraft can be distinguished from the "S-58Bs" not only by their exhaust configuration, but by the main gear. Photos of the first seven aircraft will show the original "bent-leg" (two-strut) gear, while the twenty-four hybrids would all have the later "V-leg" (three-strut) style. Any photographs or additional information on these, or any other S-58s/H-34s will be welcome.

Lennart Lundh (SAFCH #1218), 16236 South Haven Avenue, Orland Hills IL 60477-5949, USA.

## Nomarlhan Air War

D. Y. Louie

[Author's note: I found a brief description of the Nomarlhan Air War in a Japanese magazine. The translation is as follows: The Nomanhan air combat was the second RussoJapanese war fought in China. The Japanese pilots assigned to the Nomanhan front were veterans of the China air war. They were far superior in skill than the opposing Soviet pilots. On 26 May 1939, nine Ki-27s attacked a formation of 18 I-16s. The Japanese claimed nine kills without a single loss to themselves. Two days later, 18 Ki-27s of the 11 Sentai attacked a mixed formation of I-152s and I-16s. Although the Soviet pilots were veterans of the Spanish Civil War, they made the fatal error of engaging dogfights with the more nimble Ki-27s. Consequently, the Soviet lost ten aircraft to one Japanese fighter shot down. In response to the one sided air war, Stalin dispatch General Smushkhevich to the Nomanhan front hoping to rectify the situation. New Soviet squadrons were also replenished. On June 22, the V-VS sent almost 100 fighters over Zhanggufeng (Khalkin Gol). Meanwhile, the Japanese forward base had only 18 fighters ready for combat. The Japanese prudently avoided tangling with the Soviets. Nonetheless, in an engagement on June 26, Major Zabulev, commander of the 70th Fighter Squadron was shot off the sky. He had to parachute in Japanese held territory. He was rescued by his deputy, Major Gritsevets, who landed his I16 under enemy fire, and extracted his commander out on his laps. The Japanese Kwantung army launched a major attack against the Soviet air field at Tamtsak-Bulak on June 27. The strike force comprised of 104 bombers (Ki-21s, Ki-30s, and BR 20s), and 74 Ki-27s. They were met by over 150 Soviet fighters. After a fierce 30-minute air battle, the Japanese strike force broke off to be refueled for the next mission. Their target was an air field 200 miles east of Zhanggufeng. This time only a single Soviet fighter rose to intercept. And it was promptly shot down.

Meanwhile, General Zhukov managed to push the Japanese land forces away from Zhanggufeng. The V-VS, in cooperation with Zhukov troops, began a series of interdiction missions against the Kwantung Army. On July 21, the V-VS flew 100 combat planes over the disputed area as a show of force. The following day, the JAAF tried to intercept 23 SB-2s but wisely avoided confrontation when the 120 I-16 escort fighters challenged its Ki27s. A huge air engagement did occur on July 23 when 140 SB-2s and 150 I-16s met with over 80 Ki-27s. The JAAF claimed 45 I-16 kills and 8 SB-2s destroyed with 7 Ki-27 losses to itself. The ensuing air battles inflicted more losses to the V-VS. On July 25, the Soviet Air Force committed the new I-153 fighter to the battle front. A new tactics was also adopted to strafe the JAAF fighters before they could rise from the ground. On August 20, a large formation of SB-2s escorted by an equal number of fighters supported General Zhukov's 800 tanks to launch a massive offence against the Kwantung Army. The V-VS also introduced the new RS-82 air-to-air unguided rocket during the offensive mission. Two Ki-27s became victims above Lake Buyr. Three more Ki-27s and two bombers were claimed the following day. The JAAF retaliated by attacking Soviet airfields in earnest. As many as 250 I-152s and I-153s rose to meet the attackers. On August 23, the V-VS claimed destruction of 74 enemy aircraft. The JAAF admitted 10 losses. However, the JAAF lost many of its experienced pilots including Sgt. Hiromichi Shinohara of the 11th Sentai. Shinohara was credited with 58 kills.

The last air encounter occurred on September 15, henceforth hostilities ended.

D. Y. Louie (SAFCH #544), 1 Irving Place #3-16D, New York, NY 10003-1853, USA.

# Baltic Observer - The VL-Blackburn Ripon in Finnish Service

Nils Treichel

The Ripon typified the middle generation of the successful series of torpedo bombers produced by Blackburn for the Royal Navy's Fleet Air Arm between the wars. The Ripon was largely metal-framed and fabric-covered, although the aft fuselage was wooden. As the prototype was officially called Ripon I, all series aircraft, which first entered service in 1929, were properly designated Mk II. Some of the Royal Navy's Napier Lion-powered Ripons were later converted to Bristol Pegasus radial power and renamed Baffin.

Finland showed an early interest in this rugged airplane, ordering one Mk IIF (F for Finland) with a Gnôme-Rhône (Bristol) Jupiter VI 9Ak radial engine. This machine made its first flight in September 1929, bearing the Finnish serial RI-121. The Finnish version lacked the folding wings and other shipboard provisions of the RN type. License production took place at Valtion Lentokonetehtä (VL, the Finnish State Aircraft Factory), with the first delivery in late 1930. Fifteen were delivered during 1931, and production was resumed in 1934 when ten more were manufactured. VL designed and built the metal floats for the Ripon IIF seaplane.

Many different types of power plants were tried on the Finnish Ripons, among them the Armstrong-Siddeley Tiger, Bristol Jupiter (RI-29), BMW 131A, P&W Hornet B (RI-32), Wright Cyclone R-750 (RI-30), and Hispano 12Nbr (RI-59). After some modifications made by VL technicians, the AS Panther was successfully adapted for the first production batch, but the Bristol Pegasus as used on the Blackburn-converted Baffins ultimately proved to be the best Ripon IIF powerplant.

[Finnish serials of the time used a three-digit number preceded by a two-letter code which was simply an abbreviation for the aircraft's name, hence RI for RIpon. The name Ripon itself apparently came from a cathedral city in Yorkshire or its Earl, a former (1863) secretary for war. It's interesting to note that while the Finns had opted for a radial engine from the outset, the name Baffin for the RN Ripons converted to radial power was not introduced until later, and the Finnish machines were always known as Ripons. -wcd]

The Ripon, or Ripu as the Finns had nicknamed it, became the main equipment of LeLv (Lentolaivue = Flying Squadrons) 34, 36, 16, 15 and 6, in that order chronologically. It proved to be a reliable and sturdy workhorse during the 1930s, but it was woefully inadequate as a World War II combat aircraft. At the outbreak of hostilities, six float-equipped Ripons were on the strength of T/LeLv 36 at Kallvik for naval cooperation in the Gulf of Finland. The Ripu's main tasks were maritime reconnaissance and submarine hunting. It was never intended to be a torpedo bomber in Finnish service, but in the desperate days of the Winter War, such combat missions and even army cooperation flights had to be made, although the floatplanes apparently saw no combat during that period. During the Continuation War, the Ripon floatplanes, now assigned to LeLv 6 (the re-designated LeLv 36), operated alongside other such obsolescent types as the Hover MF 11 and the Dornier Do 22K. These aged warriors

performed coastal reconnaissance, anti-submarine patrols, and anti-shipping strikes against Soviet naval vessels.

By Summer 1943, the Ripon's obsolescence could no longer be denied. The type was withdrawn from first-line service; all Panther-engined aircraft were stored and the others were distributed as squadron hacks to many different units. The last one, RI-156, was retired on 16 Feb 1945. None apparently exists today, although RI-140 was rumored to have survived for preservation.

## Modelling the VL Ripon IIF

Kit-wise, we haven't got much choice - to be exact no choice at all: it's either the Contrail 1/72 vacuform or nothing! This kit is a real oldie, manufactured by a now defunct company, but it still can be found in the traders' bargain boxes at major modeling shows. I discovered one at last year's Scottish IPMS Nationals without searching for it.

A product of its age, the kit lacks detail, and a fair amount of extra work has to be done, particularly in the cockpit and engine area. Decals must to be acquired from other sources. The kit contains enough parts for two FAA models - a radial-engined Baffin and a Ripon with an in-line powerplant. The Baffin's nose is more tapered than that of the Finnish aircraft, so it's easier to cut the in-line engine off the Ripon fuselage, much like the real thing. Then it's no big deal to modify the nose with plastic or wood and add an Aeroclub engine to form the basis for a Finnish Ripon.

To achieve the correct Finnish configuration, two additional things have to be done. First, and simplest, is to reduce the rudder height by sanding. Second, the wing planform must be altered, as the Finnish Ripons did not have the wing-folding capability of their Royal Navy counterparts. This task is more difficult. I recommend inserting a thin piece of plastic sheet between the top and bottom halves of the upper wing, which can then be cut to shape and blended in with filler. With a little work, an interesting and unusual Finnish floatplane can be added to your collection.

## References:

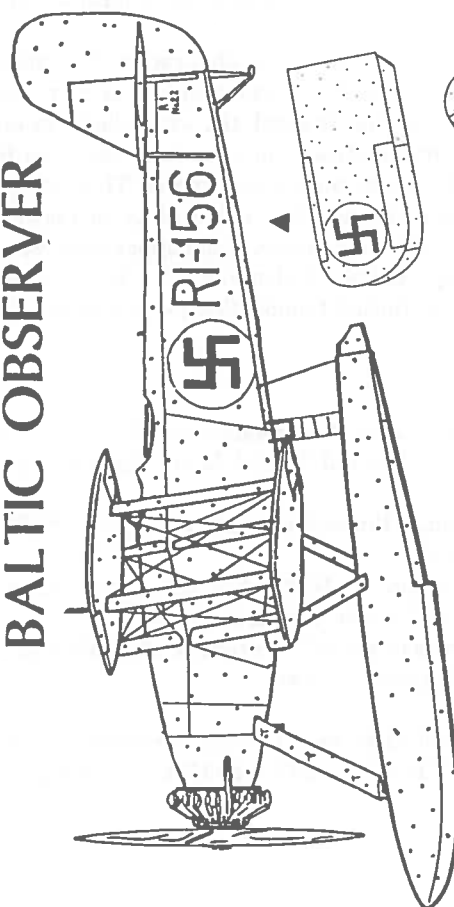
- \* Green, Bomber and Reconnaissance Aircraft - Vol 7: Warplanes of the Second World War, Garden City NY: Doubleday 1967.
- \* Keskinen, Suomen Ilmavoimien Lentokoneet 1939-72, Helsinki: Tietoteos 1977.
- \* Keskinen, Stenman, & Niska, Suomen Ilmavoimien Lentokoneet 1918-38, Helsinki: Tietoteos 1976.
- \* Ritaranta, "Personal Album", Aeroplane Monthly, Vol 12, No 10 (Issue No 138), October 1984.

Nils Treichel (SAFCH #1467), IPMS/UK Finnish AF SIG: via Bill Devins (SAFCH #557), 107 Troy Hills Rd., Whippany NJ 07981, USA..



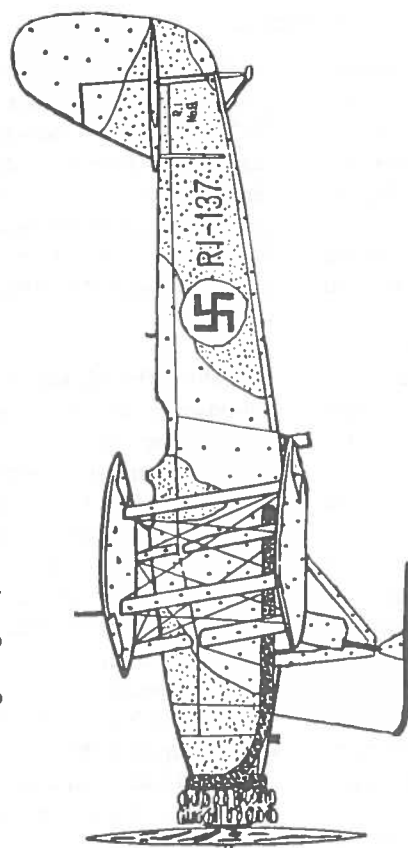
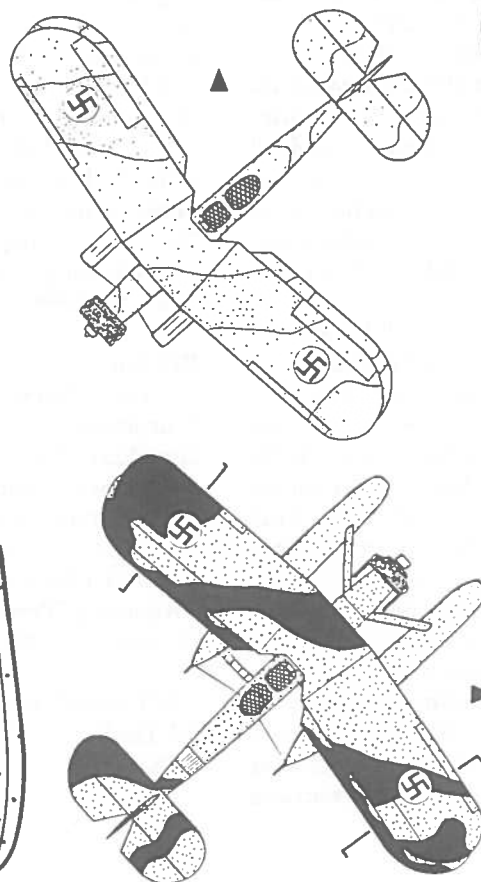
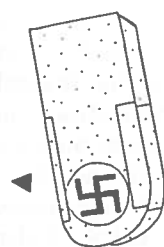
# BALTIC OBSERVER

# THE FINNISH VL-BLACKBURN RIPON



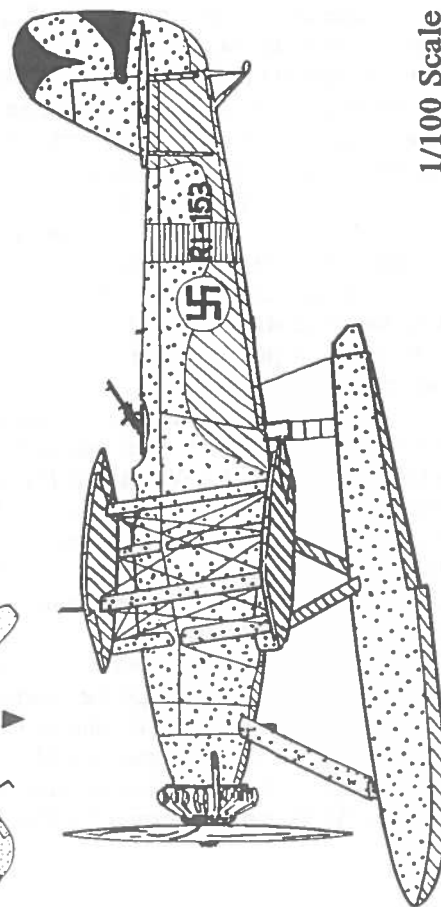
◀ RI-156 - LeLv 36, AB Santahamina, May 1936

This airplane is natural metal and silver dope overall. The serial on the fuselage side is black, as is the small works' number (RI above N°22) beneath the tailplane. Finnish national insignia, light blue *Hakaristi* on white discs, are applied in the normal six positions. Note the rope ladder connecting the metal entrance step on the fuselage with the floats, the retention of the tailskid, and the empty Scarff ring in the rear cockpit. Wing insignia position is shown in the small scrap view.



▶ RI-137 - School of Aerial Fighting, AB Kauhava, Dec 1940

The silver pre-war peacetime paint scheme as depicted on RI-156 was hastily covered with green camouflage bands after the Soviet Union's attack on Finland. Works' number is 9, applied as above. The smaller style of fuselage serial was introduced in March 1934, although repainting was only done during major overhauls. This is a Panther-engined machine equipped with a ski undercarriage.



◀ RI-153 - 4/LeLv 6, AB Maarianhamina/Aaland, Sep 1942

With Finland now an ally of Germany, this submarine-hunter displays the classic Continuation War color scheme of black and green disruptive pattern above with light blue below, along with so-called Eastern Front markings: yellow fuselage band, underside of lower wing tips (extent shown by [on the small plan-view]), and engine cowling (if there is any...) Note the high color demarcation line and the lack of black camouflage bands on the fuselage and floats. Struts are green except for the main float struts. A single Vickers K gun is mounted on the Scarff ring.

1/100 Scale

**Balkan Battles**, Turkey, Greece, Albania, Bulgaria, Yugoslavia, Romania. By Ronald Tarnstrom. *Armed Forces Handbooks*. 562 pages, 5 1/2" by 8 1/2". Hardbound. (1998) Published by Trogen Books and available only from: Bookmasters Inc., PO Box 388, 1444 St Rt 42, Ashland, OH 44805, USA. \$29.95 plus \$1.00 for shipping outside the USA.

"A strange situation developed during the 19th Century." These words appear on page 560 of this remarkable book. However, by this time the reader will be so used to "strange" things happening in the Balkans that nothing will come as a surprise.

Ron Tarnstrom, the author of this book, and incidentally a SAFCH member, began publishing the first of his "Armed Forces Handbooks" in 1979. Over the intervening years, a number of volumes have been published. However, many of these have been revised as current events become history. Nowhere is this more apparent than in the current revision of the volume on the Balkans where Ron brings the story right up to today's headlines.

But, first let Ron describe his Handbooks: "Our purpose has been to create a twenty-volume set of 'quick references' providing basic information about the armed forces of all the world's nations throughout history. The great world wars are covered, but so are the minor wars, and threatened conflicts, that pepper the intervening years. Emphasis has been placed upon the campaigns of World War II, which occupy approximately half of each volume. The rest is rather evenly divided between three periods: prehistory to the end of the Nineteenth Century, the early twentieth Century (mainly World War I), and from 1945 to the present."

Covered in this volume are not only the main Balkan countries of Turkey, Greece, Albania, Bulgaria, Yugoslavia, and Romania, but also the lesser ones such as Cyprus, Serbia, Croatia, Slovenia, Macedonia, and Bosnia-Herzegovina. The country-by-country presentation needs a bit of concentration on the part of the reader since the same wars are covered in each of the chapters on the participants. However, this redundancy is useful for it reinforces one's understanding by presenting the story for different points of view. And, if this technique causes the reader to go back to read a previous chapter, it's all to the good for it leads to a better understanding than if things were handled chronologically.

This reviewer found this book impossible to put down; many evening reading sessions extending well into the night. Name after name reverberated with memories of half-forgotten headlines from World War Two - Dnieper, Dneiper, Don. Names from ancient "Ancient History" classes came tumbling back - Pannonia, Dacia, Illyria, Avars, Aeolians, Visagoths. And current headlines kept cropping up in the descriptions of long-ago battles - Srebrenica, Banja Luka, Kosovo.

Unique to the *Armed Forces Handbooks* are the great number of maps, side views of all weapons drawing in a scale common to each class of weapon, tables of organization and equipment, and drawings of uniforms and insignia. As any long-time reader of SAFO knows, I go ape of maps. The index lists the equipment used by each country with that for the aircraft being of particular interest.

The enthusiasts of the small air forces will particularly benefit from having a handy reference to use in placing their latest aircraft project, be it a model or "just" research, into proper historical perspective. This book is highly recommended for anybody who loves history and is trying to make

sense out of today's headlines.

The only other *Armed Forces Handbook* currently in publication is "The Sword of Scandinavia" (Denmark, Norway, Sweden, Finland, & Iceland). \$24.95 postpaid. Future titles in preparation: "French Arms" (France, Belgium, Luxembourg, Monaco); "Under the Double Eagle" (Austria, Hungary, Czechoslovakia, Poland, Switzerland, Liechtenstein, Lithuania, Latvia, Estonia); "Raiders of the Seven Seas" (Portugal, Spain, Andorra, Netherlands); "Lair of the Dragon" (China, Indochina, Philippines, Indonesia); "Cauldron of the Ages" (The Middle East). Visit with Trogen Books at their Web site: [www.trogenbooks.com](http://www.trogenbooks.com).

**I Am My Brother's Keeper**, American Volunteers in Israel's War for Independence 1947-1949. By Jeffrey and Craig Weiss. 288 pages 6 x 9 in. Hardbound. (1998) Schiffer Publishing, 4880 Lower Valley Rd., Atglen, PA 19310, USA. \$29.95 plus postage.

Arriving just in time to help commemorate the 50th anniversary of the founding of the state of Israel, this book tells the story of some of the more than one thousand Americans and Canadians who fought in Israel's War of Independence. In spite of, or maybe because of, the revisionist tendency of many current historians, this is an inspiring story about ordinary people, both Jews and non-Jews, you felt deeply enough about the need for Jews to have a homeland, that they gave up their careers and traveled half-way around the world to fight for a cause in which they believed. Thirty-eight of these volunteers lost their lives.

These volunteers served in all branches of service and included the first commander of the Israeli Navy, the first general of the Israeli Army, and Israel's first tank commander. Israel's first test pilot was Slick Goodlin who also flew the X-1 and the top aces of the War of Independence were the American Rudy Augarten and the Canadian Jack Doyle.

Of particular interest to aviation enthusiasts are the chapters describing the trials and tribulations of obtaining aircraft for the fledgling Israeli defense force. The means of getting them out of country of origin, and flying them to Israel make fascinating reading. Some of the ruses used to circumvent the UN embargo on arms sales to the belligerents are absolutely outrageous. In addition, these narratives add much greater understanding to events already known to the reader through other sources. For example, the chapter on the acquisition of Spitfires from Czechoslovakia nicely supplements that told by Malcolm Laird in his book "Star of Israel".

The book includes 32 pages of photos (only a few of aircraft). A basic, but serviceable, map allows the reader to follow the flow of the actions described. The index includes only the names of persons, but for once I got smart early enough to keep paper and pencil handy so I could index every mention of an aircraft. This index should prove useful in adding historical footnotes to future SAFO articles.

This book helps put a human perspective to the very crucial event in modern history the consequences of which still reverberate in our time. It is highly recommended to anyone who is trying to understand today's headlines.

**North American Aircraft 1934-1998 Volume 1**. By Norm Avery. 204 pages, 8.5 x 11 in., 375 photos (348 b&w, 27 color), 20 three-view and line drawings. Softbound. (1998) Narkiewicz/Thompson, 1331

South Birch Street, Santa Ana, CA 92707, USA. \$39.00 plus postage. 1998.

This is the first of a two-book series that will cover all the aircraft built by North American Aviation. Volume 1 includes chapters on the O-47, NA-16/AT-6/SNJ trainer series, XB-21, MS-35, B-25/PBJ Mitchell, XB-28, NA-73/P-51/A-36/F-6 Mustang, P-82 Twin Mustang, B-45 Tornado, F-86/YF-93 Sabre, FJ-1/-2/-3/-4 Fury and NAA production of B-24s and C-82s.

This book is identical in format to the three previous volumes in Jonathan Thompson's series on American aircraft manufacturers. Those of you who are familiar with this excellent series will need no further encouragement to buy this book. However, for those who may not have seen any of their previous books, here is a summary of the contents. The discussion of each aircraft type begins with a short, but comprehensive, text covering the development and service history which includes a table of specifications and a table listing production by NAA number, designation, and s/n range. This is followed by the photos that make up the bulk of the book. The reproduction of both the b&w and color photos is outstanding. As an example, the chapter on the O-47 consists of 8 pages including 16 photos. Also, each type is illustrated by drawings of varying quality from a variety of sources. For example, the O-47 is illustrated by multi-view 1/144-scale drawings by Mike Keep reproduced from 1/72-scale drawings that appeared in *Aviation News*. The drawings of the XB-28A are in 1/192 scale and are NAA Factory Drawings.

Among the aircraft that caught my attention was a perspective drawing of a concept for a 400-mph, low-altitude attacker with two Allison V-3420s in the fuselage driving twin pusher propellers. If kit manufacturers are so loved with unbuilt aircraft, why not chose something like this for a change instead of all those Luftwaffe projects?

Although the small-air-force content of these books is small, any aviation enthusiast interested in American aircraft manufacturer should have all the volumes of this marvelous series.

**Sharks of the Air**, Camouflage and Markings of the American Volunteer Group. By Terrill Clements. Spiralbound. (1998) Available from Terrill Clements, 1957 6th Ave. W. #1, Seattle, WA 98119-2870, USA.

Terrill Clements has so extensively revised his book on the "Flying Tigers" that it is virtually a new book. All the virtues of the first edition have been maintained: the authoritative text, well-researched side-view drawings, and color photos from private albums. However, all sections have been enlarged and many new sections added. The changes are so extensive that the author decided to change the title.

Let Terrill describe some of the changes, "I have substantially increased the number of profile drawings, and corrected and improved many of those that were in the first edition. The text and captions have also been revised and substantially expanded. The color data has now been moved to an appendix, and appendices on operational data, the characteristics of the Tomahawk, and AVG Tomahawk serial number data have also been added. In nearly all aspects of the research for this book, I've been continually impressed by how incomplete and inconsistent the information was in presumably reliable sources about things that most people would think of as simple 'objective' facts. It doesn't

surprise me much anymore."

The book consists of 100 pages, in the standard US 8.5 x 11 in. size, spiral-bound between color covers. Numerous b&w photos are dispersed throughout the text. There are also 13 color photos reproduced on a high-quality color copier, and an actual color photograph pasted onto the title page. There are 25 full-page side-view drawings, many with enlarged views of squadron and individual insignia, placement of wing roundels, etc. The appendix on AVG colors included 11 paint chips, but if you want these you must act quickly because the author says, "The amount of hard labor involved in preparing the paint chips is more than I can handle at present, so only the initial, signed copies of the book will have them."

The back cover has copies of a pair of vintage color paintings illustrating the role the Flying Tigers played in American popular culture. One painting, from the book 'America's Fighting Planes' published in 1943, shows a pair of shark-mouth Warhawks downing a generic Zero. The other shows two AVG pilots sharing a Coca-Cola with a Chinese friend while standing in front of a shark-mouthed P-40. Nostalgic stuff. Once more Terrill comments are appropriate, "I would also like to thank the Coca-Cola Company for allowing me to reproduce their 1943 ad on the rear cover. And thanks to Time/Life and the National Geographic Society too. Someday they'll get around to okaying my request to reproduce their photos! (If it's any consolation to their lawyers, I'm losing my shirt on this project!)" It's a shame that these companies are so busy making money that they cannot find the time to acknowledge the hard work of someone who so unselfishly adding to the shared knowledge of our historical past. Perhaps some of you would like to write to these companies, particularly if you're a stock holder, and chastise them for their lack of community spirit.

This book is a must for anyone who has ever built a model of an AVG Tomakawk, or is planning to build one. It is also highly recommended as a paradigm for anyone who has even the vaguest thought of doing a book on a favorite aircraft. Terrill's e-mail address is terrillc@earthlink.net.

**Red Stars Vol. 2, German Aircraft in the Soviet Union.** By Carl-Fredrik Geust and Gennadiy Petrov. 160 A-4 pages. Hardbound. (1998) Apali Oy, Sammonkatu 64, 33540 Tampere, Finland.

Admittedly, a book on German aircraft carrying Soviet Red Stars is not small-air-force stuff, but there's nothing a small-air-force enthusiast loves more than to see familiar aircraft in unfamiliar markings. If you suffer from this proclivity, then "Red Stars, Vol. 2" is for you, no matter what your preference in time period may be.

The book is primarily a photos book; the first 138 pages consists of photos with dual Finnish/English captions. There are no more than three photos to a page and all are well reproduced on high-quality glossy paper.

The Imperial Russian period is covered with 23 photos of Albatros B.II & C.III. The Civil War period gets 52 photos including Albatros C.XII, Aviatik C.V, Halberstadt C.I & C.V, Brandenburg C.I, Roland D.II, DFW C.V, LVG C.III & C.V, Rumpler C.IV, Friedrichshafen FF.33 & G.III, and Junkers D.I. The inter-war period has 90 photos: Junkers Ju 20, Ju 21, JuG-1, F.13, W.33; Dornier Komet and Wal; Albatros L.76; Heinkel HD.37 and HD.55 aka KR-1. (The coverage of Soviet Wals in 21 photos is more than you would find in a book devoted to this type.) The remaining 72 pages of photos consists of photos of aircraft either obtained from Germany immediately before WWII

or captured during the war. Aircraft depicted are: Ar 96, Ar 196, Bu 181, Do 24, Do 215, Do 17, Do 217, Fi 156, Fi 282, Fw 58, Fw 189, Fw 190, Fw 200, Go 145, He 51, He 100, He 111, Hs 129, Hs 126, Ju 52, Ju 87, Ju 88, Ju 252, Bf 109, Bf 110, Me 410, Si 204, Me 262, He 162, Hs 132, Me 163, Ar 234, and DFS 346.

There are several appendices: (1) 14 side-view drawings of F.13, S.22, J.21, W.33, & W.34. (2) "German Russian Cooperation in Aviation: A Short Chronology" 6 pages of text in English. (3) "German Aircraft Flown or Captured in Serviceable Condition and Investigated in the USSR during World War II" a 4-page table listing of individual aircraft and their history in Soviet service. (4) "1945-1952" a one-page history of East German aircraft design efforts. And, (5) nine pages with 39 color side-view drawings (Halberstadt CL.IV, Brandenburg C.I, Albatros B.II, Friedrichshafen FF.33, Junker J.21, LVG C.III, Albatros C.XII, Junkers Ju 20, Dornier Komet, Wal, Do 215, He 111, Junker F.13, Heinkel KR-1, Ju 52, Do 215, Ju 388, Fw 200, Junkers EF-131, Baadwe 150, Bu 181, Fi 156, Fw 190A, Hs 129, Ar 196, Bf 109G, Fw 189, Bf 110, Si 204, Fw 58, Fw 190D, Me 410, Me 262, Ar 234, & Me 163.

My apologies for boring you with these long lists of aircraft, by the strong point of this book is the variety of aircraft covered. "Red Stars, Vol. 2" is an outstanding book that will entertain the enthusiast for years. And, imagine the bewilderment of your friends when you show them your model of an Ar-234 in Soviet markings.

**Saksalaiset Koneet Suomessa (German Aircraft in Finland 1939-1945).** By Kalevi Keskinen and Kari Stenman. Softbound. Apali Oy, Sammonkatu 64, 33540 Tampere, Finland. 1998.

This, #16 in the "Suomen Ilmavoimien Historia" series, continues their now familiar format: 128 pages (17 cm by 25 cm) of photos beautifully reproduced on high-quality glossy paper. I won't even attempt to count the photos, but there are from two to three on 114 pages of the books. These photos are all of Luftwaffe aircraft operating in Finland during WWII. Aircraft shown include Bf 109, Fw 190, Me 110, Ju 87, Ju 88, Ju 188, Do 17Z, Do 217, He 116, W 34, Ju 52, Ju 90, Fw 200, SM 81, C.445, Hs 126, Fw 189, Fi 156, Fw 58, Ar 66, Ar 196, Ar 199, He 59, He 60, He 115, and BV 138. Captions are given in both Finnish and English.

The photos are marvelous. No sterile "company" shots here, but evocative in-flight compositions and candid ground shots that will get any modeler's "diorama receptors" itching. It seems as if every Finnish airman carried a camera with him at all times and was not afraid to use it. How ironic! Here were the Finns, operating right in the jaws of the Russian Bear, and they didn't worry of the security risks of cameras, while in most other countries cameras were strictly forbidden even in peace time. Non-photographic content includes four pages of Finnish text at the beginning; a two-page English language summary at the end; a map of Finland showing the changing political boundaries, major cities, and the location of 37 airfields; two pages of color drawings of 32 unit insignia, and a page with four color side-view drawings (two each of Bf 109 and Fw 190).

Nothing in here for the dyed-in-the-wool small-air-force enthusiast, but a must for the anyone purporting to have a collection of on military aviation in Finland during WWII. Also, an absolute must for the modeler of Luftwaffe aircraft.

**The Israeli Air Force 1947-1960: An Illustrated**

**History,** Salvador Mafo Huertas, 174 pages, 22 x 28 cm, hardbound. 144 b/w and 36 colour illustrations. Schiffer Publishing, 4880 Lower Valley Road, Atglen, PA 19310, USA, 1998. Price \$35.

If you are looking for a single volume covering the early history of the IDF/AF, this book is probably as complete as any, if you don't mind second-hand writing.

The author expresses thanks to the many IAF veterans who has assisted his research. Alas, none of them are named and there is nothing in the book to indicate that the author has had any extensive such contacts. No written sources are mentioned, although the author has obviously had access to some archive material.

My first impression when looking through this book was one of *deja vu*: many parts looked quite familiar. Unfortunately, this proved to be more true than I suspected at first. A quick comparison with the book "Spitfires over Israel" published by three other authors a few years ago show that Huertas has lifted at least parts of his text from that book. In just a few minutes I found two sections in different chapters copied almost verbatim! One cannot help wondering where the rest is copied from.

All the historical photos are from official sources and most, if not all of the aircraft photos have been seen in print before. At least two of them are even used twice in this book! The colour illustrations are all of preserved aircraft plus a few squadron badges.

Under other circumstances I might perhaps have recommended this book, but I have a hearty dislike of outright and unacknowledged copying. My advice is to avoid this book, unless you want to reward plagiarism.

Leif Hellstrom (SAFCH #786), Norrskensbacken 13, SE-146 46, Tullinge, Sweden.

**Curtiss Hawk 75,** Gerry Beauchamp and Jean Cuny, 344 pages, 20 x 26 cm, softbound. 228 b/w photos, 45 colour profiles, various drawings and detail sketches. ViP Publishers, PO Box 16103, Colorado Springs, CO 80935, USA, 1996. Price £38.95 from Midland Counties.

Given the choice between a slick, nicely edited book with nice colour photos and otherwise indifferent contents, or an unpretentious publication with little or no colour but meticulously researched text, I'll take the latter each time.

This book falls in the latter group. An enthusiast production, aimed at a rather narrow target group. The layout is quite similar to that of the SAFO, actually. The photos are often small (typically 8-10 x 5 cm) but reasonably well reproduced. The colour profiles are excellent.

The book covers the full development and service history of the P-36 and derivatives (other than P-40) in great detail. Parts of the contents has previously been published elsewhere by the publishers but here it is all in one volume. The chapter headings are: 1 - Development of the Curtiss Hawk, Model 75; 2 - Curtiss Hawk 75/P-36 Detailed; 3 - Shades of the Future [XP-37/XP-42, etc.]; 4 - H-75/P-36 in US Service; 5 - The "Stiff-legged" Hawks; 6 - France Buys the Hawk 75; 7 - The French Hawks at War; 8 - French Hawks in Africa; 9 - Hawks Against the French in Asia; 10 - British Empire Hawks; 11 - Hawks around the World; 12 - Hawk Camouflage and Markings. These are followed by 11 appendixes, including one on modelling.

From a SAFCH angle, there is good coverage on the Hawk 75 in foreign service. Illustrations for small air forces include (photos + colour profiles): Argentina (6 + 1); China (3 + 3); Finland (3 + 4);

Iran (2 + 1); Netherlands East Indies (2 + 1); Norway (6 + 2); Peru (2 + 0); Portugal (1 + 1); Thailand (6 + 1). There are also plenty of detail photos for the modeller.

An excellent addition to any SAFCH reader's bookshelf and bound to become a classic.

Leif Hellstrom (SAFCH #786), Norrskensbacken 13, SE-146 46, Tullinge, Sweden.

**Os Primeiros Anos do 1/14 Grupo de Aviação.** The author, a former FAB officer tells the history of the unit since 1933 when the 3 Regimento de Aviação was created, the operation of the P-40 and the

change over to the Gloster Meteor. Mainly he tells of his experiences in the unit and how it was to fly the P-40 in the Força Aérea Brasileira. It includes several never-before-published photos and a drawing of the Units former "Ze Carioca" badge, which was changed some years later to include the motto "Ja te atendo tche!". Indispensable for any reader with Portuguese or Spanish knowledge.

Sergio Luis Dos Santos (SAFCH #1202), Rua Jardim Botânico 647/301, 22470-050, Rio de Janeiro - RJ, Brazil.

**P-47 B 4 O Avião do Dornelles.** It's an account of

how a group of former FAB personnel and aviation lovers restored a P-47 to in-flight condition. Includes several photos of the plane, tells about the difficulty and joy, why the Veterans of Primeiro Grupo de Caca chose Dornelles' markings, and the official prohibition of flight given by Aeronautics Ministry.

Both books available from: Incaer - Instituto Histórico Cultural da Aeronáutica, Praça Marechal Ancora 15-A, 20021-000 Rio de Janeiro, Brazil.

Sergio Luis Dos Santos (SAFCH #1202), Rua Jardim Botânico 647/301, 22470-050, Rio de Janeiro - RJ, Brazil.

## magazines-magazines-magazines-magazines-magazines-magazines-magazines-magazines-magazines-magazines-

I have just gotten the latest issue of the Finnish magazine, Suomen Ilmailuhistoriallinen Lethi (The Finnish Aviation Historical Magazine) issue 1/1998. I must tell you that I do not read the Finnish language, but the magazine comes with a condensed English summary which I found very helpful. Of course, the photographs and drawings need no translation. The editorial office is: InScale 72 Production, Makelankatu 5B10, FIN-00550 Helsinki, Finland.

The front cover has a picture of a Finnish Messerschmitt Bf-109G, taken in July 1944, and shows the airplane in the late-war German camouflage scheme, but with the Finnish national insignia in six locations (blue swastika on a white or possibly light gray disc). The theater markings are the usual yellow aft fuselage band and the yellow wing-tip undersides. The rudder has a small 'Fledgling eagle' insignia of 1/HLeLv 34 in black.

The first article (and a three-view drawing) is of a British Percival Proctor which was manufactured to Civil standards at Luton in 1946 and procured by a Finnish firm. This airplane seems to have had a hard early life due to the rough handling it got at the hands of its various different pilots who crashed it while drunk! The article contains five photographs which illustrate at least two color schemes. In addition a number of sketches.

This issue also has a very interesting comparison of the performance of the Fw 190A versus the Bf 109G. In addition to their performance comparisons, the author investigated their ease of manufacture and repair/maintenance and their survivability to combat damage. The article is illustrated with five Fw 190A photos, a number of component sketches, and a pair of three views of the Fw 190A and the Bf 109G. I have never read an analysis of this nature before, and I hope that the author will do more work in this arena.

The magazine also has an article describing the conditions that the German Blohm & Voss 138 flying boats had to face while operating against the Murmansk convoys.

Another article describes the work of the Finnish test pilots and the difficult time that the maintenance depots had to perform to keep the front line squadrons active. This is a story which has not had much play in the West, and it really needs to be much better known. This article has an interesting photo of three Finnish biplane Viima II trainers, taken in August 1940 at Halli. They are described as being painted in Trainer Orange, but with the upper surfaces overpainted with green thin squiggle lines! This would certainly make an interesting model, especially since the nearest airplane seems to have a different intensity of wing swastika on each wing panel.

The final article is of the search for the sunken armored ship Rusalka of the Russian Baltic Fleet

in 1894 using a captive balloon at sea. The Rusalka sank September 1893 in a storm in the waters off Helsinki with the loss of all her crew. The hydrogen balloon was operated off the derelict powered schooner, Samoed. The Samoed had her engine and masts removed, and became a towed barge. A 'flight deck' which greatly overhung the hull was built amidships to accommodate the balloons. The wreck of the Rusalka was not found, but in general the balloons performed in a satisfactory manner. The article is illustrated with two photographs, some sketches showing the flight deck arrangement and a hull drawing of the Samoed. I remember reading that captive balloons were used by the Union forces during the U.S. Civil War for reconnoitering Confederate positions. They were operated from barges which were towed back and forth on whatever rivers were close to the front lines. But I am moved to ask, might Samoed have been the world's first seagoing 'aircraft carrier'? Gus Morfis (SAFCH #3), 4709 Green Meadows Ave., Torrance CA 90505-5507, USA.

**Revista Força Aérea Ano 3 #10.** An interview with Commander of Fuerza Aérea de Chile, General do Ar Fernando Rojas Vender. F-5 from 1 Grupo de Aviação de Caca now wears the Blue Ribbon of the Presidential Unit Citation given by US Congress in 1986 for the 1 G.Av.Ca P-47 missions in Italy during WWII. "Gripen Finalmente Operacional" A special report of the newest Swedish fighter. "Centaurus do Sul" a profile of 3/10 GAv with several color photos and a side view of AT-26 Xavante. ALX A Nova Revolução" The Super Tucano has so much new avionics and structural changes that EMBRAER gave it a new designation: EMB-314 ALX instead of EMB-312 Super Tucano. Several color photos including armament, 2-page center posters (an in-flight photo and a special drawing). "HMS Invincible" A report about the Royal Navy's aircraft carrier and an interview with its commander, Roy A. G. Clare. Several color photos. "Um Dia No Parque". How the Parque de Material Aeronáutico do Afonso, in Rio de Janeiro, performs the maintenance of FAB planes and choppers. "O Primeiro Jato" The Gloster Meteor F-8/TF-7 in FAB service. Several photos and 8 color profiles showing several color schemes including the only one camouflaged which is preserved in the Museu Aeroespacial do Rio de Janeiro.

Sergio Luis Dos Santos (SAFCH #1202), Rua Jardim Botânico 647/301, 22470-050, Rio de Janeiro - RJ, Brazil.

**Seventy-Second Scale Modeller (S<sup>3</sup>M).** Vol.1, No.1 June 1998. AIRgen Publications, "Hillside", 20 Allendale Road. Hoyland, Barnsley, South

Yorkshire S74 9AP England. 12 issues for £50.00 in Europe and £55.00 RoW (rest of world) including postage.

From the same people who bring you Quarter Scale Modeller, comes a magazine devoted entirely to the modeling of 1/72-scale aircraft. Produced in the same high-quality format as QSM, this premiere issue consists of 40 A-4 size pages between color covers. Articles are: "Shooting Star" 10 pages including 18 photos of models, 6 side-view drawings, numerous sketches of details, drawings for converting the Airfix kit into a RF-80, and sketches and drawings on improving the Airfix kit. "Backfire" 4 pages including 8 photos of the model. "A Wolf in Sheep's Clothing" 3 pages on building the FW 200 as 'G-AGAY' including 5 photos of the model. "Gloster's Giant" 5 pages on modeling the various marks of the Javelin including 13 photos of models. "The Bristol Bulldog" 3 pages including 7 photos of the model. "It's All Rigged" one page on rigging biplanes with "invisible thread". "Model Building" 5 pages on modeling a WWII airfield control tower including 3 photos and many sketches.

The feature article on the P-80 is very interesting, so much so that I found myself reading it over several times. partly because it was so packed with useful information and partly because subject is so complex (I still haven't figured out what figure A3 is all about). I wouldn't attempt to build the Airfix P-80 without this article at my side. The article on building buildings for an airfield diorama was also a "good read"; imagine building a brick wall my pasting on individual bricks made from the punchings from old computer cards (I should have kept these, they would be worth a fortune now.). The other articles, while providing many useful hints, are less engrossing. The Gloster Javelin, in particular, deserves a feature article in a future issue. For the aircraft modeler, S<sup>3</sup>M far outshines Fine-Scale Modeler, and has the potential to become the "pick of the litter".

**Scale Aviation, Volume 1, No. 1.** The new magazine from Japan is typical of what we expect from the Japanese: High-quality color photos of superbly-built models detailing every step in their construction and generously supplemented with color photos and sketches of detail of the real aircraft. Major articles in this first issue are: "Bf 109G2" 7 pages with 40 color photos of black '6', a museum aircraft; "Hawker Tempest/Typhoon" 7 pages with color photos of models. "Seversky P-35" 6 pages with color photos of the model. "Bf 109B" 6 pages of sketches apparently from a maintenance manual. "Nocturnal Raptor" 40 pages with innumerable photos of models and aircraft and sketches of details of the aircraft and sketches of construction steps for building every conceivable

version of the He-219.

This reviewer finds it difficult to do justice to this new magazine from Japan. Both the language and culture barriers prevents me from properly evaluating the 120 page of information packed between the covers. The reader unfamiliar with the Japanese language will have to judge for him/herself whether this magazine will be a useful addition to his/her modeling enjoyment.

**INminiature 1/98**, The Magazine of IPMS New South Wales. PO Box 949, Glebe NSW 2037, Australia.

For years, IPMS NSW has published an excellent magazine under the title "News & Views". Now, apparently with a complete change in editorial staff, they have decided to use a new title while retaining the volume count continuing with Volume 14.

The first issue under the new title consists of 20 A-4 size pages wire bound between sturdy stock covers. Besides the usual Reviews and Tips, there are two main articles: (1) "Size isn't Everything: Supermarine Spitfire Mk IXc in 1/72 Scale". A 4-page article including 7 photos of the model highly detailed with cockpit and engine detail and finished as 'UZ-K' of 306 Polish Squadron. I will never understand how anyone could put this much work detailing a model and then be satisfied with applying squadron codes grossly out of proportion. (2) "In a Panic: The tale of the CAC Boomerang" A-4 page article on the history and modeling of the Boomerang including 3 photos of the real thing and 3 photos of the model built from

the 1/72-scale Airfix kit. The author makes an interest observation: "The entire model had the rivets and raised lines sanded off. When performing this task on the old Airfix kit I found that a faint recess was left on either side of where the raised lines were. These look like faint recessed lines so I didn't need to engrave any." A great tip if it holds for other kits with raised panel lines.

The second issue will be expanded to 32 pages. Unfortunately, I cannot find any subscription information, but if you're interested, IPMS-NSW has an e-mail address: [peters@sue.econ.usyd.edu.au](mailto:peters@sue.econ.usyd.edu.au).

**Aviatsiya i Vremya** (Aviation & Times), 4 '97. Those of you who have seen this magazine from the Ukraine know it is an excellent publication - equal in every way to the best in the world and full of exotic information. If you've never seen this magazine, let me introduce it you by describing a recent issue. [Editor's note: This issue was not picked at random, but since I have 16 in stock, I thought it should be given a plug.]

Each issue of Aviation & Times consists of 48 A-4 size pages including color covers and an eight-page color center section. In addition, each issue contains a folded insert (equivalent to 16 pages) containing detailed scale drawings of the aircraft featured in the issue.

The featured aircraft in 4 '97 is the TB-4, the 4-engined Soviet bomber of the 1930s. The article on the Tu-4 consists of 17 pages including 51 photos, a color cover painting, and 3 color side-view drawings. The giant insert consists, on one side, of 1/72-

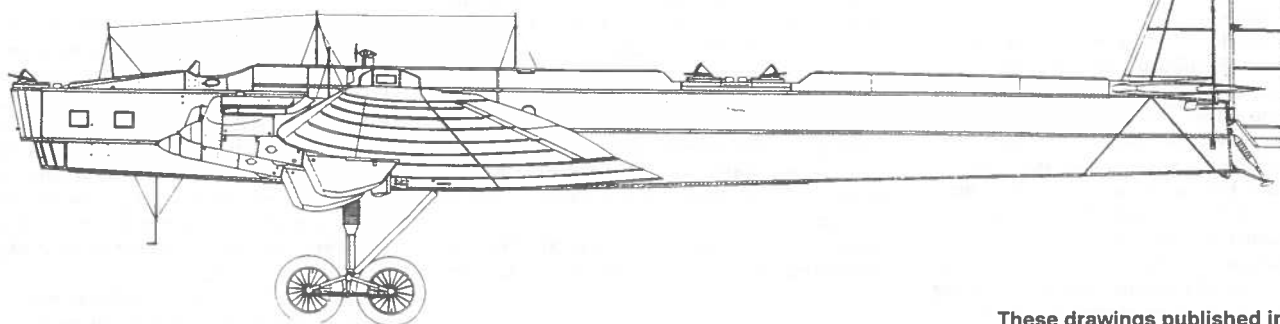
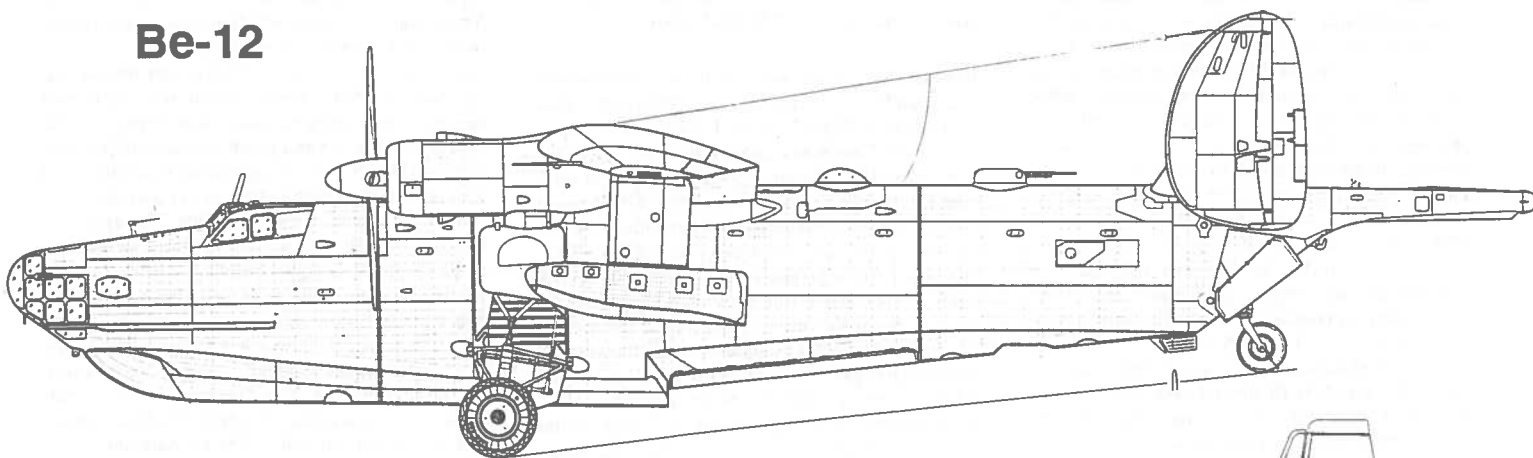
scale multi-view drawings and, on the other, 12 1/72-scale side-view drawings of variants. A book containing this much information would cost twice as much as the magazine.

But, that's not all. Other articles in this issue are: (1) the OV-10 with 8 pages including 13 photos, 4 pages of 1/72-scale drawings, and a color page showing all the stenciling on a USMC Bronco. (2) A short 3-page article on the An-2 including 3 color side-view drawings (2 Soviet and one Croatian). (3) A 6-page article on Imperial Russian aviation including 16 photos and 3 color side-view drawings (Farman, Nieuport XIX, & Albatros B-1). There are shorter articles on Il-76, the An-Bc-20, and on Soviet aviation in the Karelian Isthmus during the winter-summer of 1994. However, my complete ignorance of the Ukrainian language does not allow me to comment on these.

You don't have to read the Ukrainian language, or even understand the Cyrillic alphabet, to appreciate the photos, color drawings, and outstanding scale drawings in these magazine. Other aircraft featured in issue in stock are: Yak-38 (6'95), MiG-19 (5'95), Pe-3 (4'95), Mi-4 (3'95), Ka-25 (6'96), Tu-95 (5'96), BBC (4'96), Mi-24 (3'96), Tu-22 (2'96), Mi-8 (1'96), Yak-25 (6'97), Be-12 (3'97), Tu-128 (2'97), Il-28 (1'97), and Il-4 (1'98).

These magazines are highly recommended to everyone interested in Soviet/Russian aviation in particular and to anyone interested in high-quality scale drawings in general. See the Sales Service for price and availability.

**Be-12**



**TB-3**

These drawings published in *Aviatsiya i Vremya* in 1/72 scale are reproduced here in 1/144 scale



The Aviation Usk kit comes in their usual colorful end-opening box crammed full of plastic. In fact, I find their boxes a little too small since I have trouble cramming all the parts back into the box after I've looked them over. The main parts are modeled in light-grey styrene with a minimum of flash and finely-engraved panel lines. Interior detail consists of plastic floor, seats, and control stick supplemented with an elaborate etched-brass fret proving instrument panels, rudder pedals, seat belts, and side wall detail. A photo negative of the instruments faces for the main panel and the observer's radio are provided for mounting behind the brass. Construction is straightforward, but experience and patience are required since the are no locating pins and all parts are butt joined. Most modelers will want to add detail to the float wells, but they're on their own since no information on this area is provided. You'll be glad you did a good job on the interior details since the vacuformed canopy is large and very clear.

The 4-page instructions are well done with exploded construction drawings for each step, 1/72 scale drawings, and tone drawings for the port, starboard, top, and bottom showing the color scheme and placement of the markings. The decals sheet is excellent but simple, consisting of separate white and red disks to avoid registration problems, the red propeller-warning stripes for the main float, stripes marking the position of the beaching trolley on the main floats, and fin code (of admittedly doubtful authenticity).

Although I had hoped for kit of another Italian aircraft, perhaps the Ro.41, this kit of the Norm is most welcome. It will be particularly welcome by enthusiasts of things without wheels in general and to modelers interested in Japanese aircraft in particular.

**German Glider Bomber - 1945, 1/72-scale resin kit with photoetched parts. Ceco, c/o Cvetelin D. Ivanov, Poltava 7A, ap. 22, V. Tarnovo 5000, Bulgaria. \$7.00.**

For his first "garage" project, fellow SAFCH member Cvetelin Ivanov of Bulgaria, has chosen to follow the trend of manufacturers, both big and small, by producing a kit of a Luftwaffe project. However, the Lippish Glider Bomber is not a bad choice for a first release since it is a small simple aircraft - ideal for a first effort from a new manufacturer.

The glider is a dart-shaped aircraft with the leading edges of the forward-set wings highly swept-back and a slim fuselage terminating in a cuneiform tail. The 1000 kg bomb, slung under the fuselage, is almost as large as the aircraft. The glider was to be dropped from 10,000 m and attain a speed of Mach 1 before releasing the bomb at 700 m. As the English/Bulgarian instruction puts it, "the plane was intended to reach friendly territory but the system for landing and saving the pilot remains unknown".

The kit comes in a tiny (15 x 8 x 1.5 cm), but sturdy 2-part box with an attractive drawing of the aircraft on the cover. Inside are 11 beautifully-cast light-tan resin parts; not a bubble or blemish in sight. As befits a wooden aircraft, the surface detail is sparse but well done with cleanly-incised panel lines and well-delineated control surfaces. Also included is a very clear vacuform canopy, a length of thin tubing

The kit is somewhat let down by the instruction sheet which, besides an excellent text and an excellent 1/72-scale 3-view drawing, has no construction drawings. While construction of the glider should present no problems, the use the brass parts in building the bomb is not clear. Painting instructions list overall RLM 76 for the prototype and overall RLM 74 with RLM 75 spots for series-built aircraft. (It is not stated if any series aircraft were built or even if the prototype was completed.) There are no decals, but late-style Luftwaffe 1945 crosses are suggested.

This kit is recommended to any experienced modeler who likes exotic aircraft. However, experience is necessary since all the resin parts are cast on heavy pedestals that need careful removing; for example, the pedestal on the fuselage runs the entire length along the bottom.

Squadron Shop advertises a 1/48-scale "Lippisch Gleiter Bombenflugzeug" from Planet Models for \$42.98 plus postage (on sale for \$19.99 plus postage). Cveticin is asking \$7.00 for his kit including postage to anywhere in the world. I think this is a ridiculously low price considering the quality of the kit (you pay that much for a brass set alone), and you would be doing yourself a disservice if you sent him less than \$10.00.

[Editor's note: I'll try to get some of these kits for the Sale Service. I hope they sell well since we want to encourage Cvetelin to continue producing kits of this excellent quality. Who knows, if his business thrives, he might consider producing kits of Bulgarian aircraft.]



SCALE 1/72

This sheet is far superior to that supplied with the Hobbycraft kit and is a must for anyone building a model of a Canadian CF-100. Skylancer will undoubtedly release a sheet for the Belgian Cf-100, so

Set 48-07B: Bell 206 Jet Ranger II, TBM-3

FCM Decals 07. This is a special issue of the V Salao de Modelismo do Clube Naval, an annual modeling contest in Rio de Janeiro at the Navy Club. This year the exhibit and contest occupied two floors of the Club with an attendance over 6,000 people! FCM Decals have released some sheets depicting Brazilian Air Lines like TAM, ITAPEMRIM, and VARIG. Anyone interested may contact them through the internet at <http://www.webspace.com.br/fcm> which includes the complete color catalogue of available sheets. Sergio Luis Dos Santos (SAFCH #1202), Rua Jardim Botânico 647/301, 22470-050, Rio de Janeiro - RJ, Brazil.



"In the December 1997 issue you asked for more information about the Lithuanian Martinsyde F-4 Buzzards. I came up with the following: In 1920, a detachment of Lithuanian Americans visited Lithuania, which at that time was fighting for its independence. Once they returned to America, money was raised in the Lithuanian immigrant communities to acquire airplanes to add to the emerging Lithuanian Air Force. Two Martinsyde F-4 were purchased. They were named 'Amerikietis' and 'Amerikiete' - male and female American. These names were painted in large letters on the fuselage. Underneath the names was written 'Amerikos Lietuviu auka' Lithuanian American donation.

"According to the reminisces of Leonard Paseckas (Karo Lakuno Pasakojimai: Stories of a Military Pilot, 1992, Kaunas), who served in the Lithuanian Air Force from its beginnings, the plane was equipped for duty as a fighter and light bomber, and was also used for advanced pilot training and executing the basic aerobatics of the time. Paseckas had his own adventures with the Martinsyde. While flying a salute to a visiting British warship, Paseckas had engine trouble with his Martinsyde, just barely reaching land before the plane landed 'like a heavy chicken'. Paseckas writes that the planes were both in service for more than a decade. The 'Amerikietis' was in service until 1937. Having survived Paseckas' brush with the ocean, it finally met its end when a student pilot perched it on some telephone lines.

Ed Vaitones (SAFCH #1412), 16 Berry Court, Milford, NH 03055, USA.

"In response to Dan Hagedorn's letter (SAFO #84) about my article "Three Aircraft of the Mexican Air Force" that appeared in SAFO #83, I have more information on the Baja California BC-2. According to my records, in November 1927 the company was known as 'Compania Aeronautica de Baja California S.A.' which was changed, at some

later time, to 'Compania Aeronautica Constructora y de Transporte S.A. de Tijuana'. The Administration Memories of 1924-1927 for Baja California lists the initial company name as 'Compania Aerea de Construccion y Transporte S.A.'.

Concerning the BC-2 itself: After a series of long-range flights to Cuba and throughout Central America, Col. P.A. Roberto Fierro Villalobos handed the BC-2 over to the Mexican Air Force. It was listed in a report that was part of the Inventory of Military Aviation School at Mexico City circa 1929. But, to my knowledge, there are no photos showing the BC-2 in Mexican Air Force markings. It is reported that when Capt. P.A. Miguel Colanado Cupido attempted his non-stop flight from Baja California to Meaida Yucatan, the BC-2 had been renamed 'Plutarco Elias Calles'. During this flight the BC-2 crashed on January 1930 near Culiacan; Sinaloa surviving the crash."

Santiago A. Flores (SAFCH #588), PO Box 430910, San Ysidro, CA 92143-0910, USA.

"I just want to say that the web cannot give us the satisfaction of looking into our mail box for the latest issue of SAFO or the pleasure of reading it on our way to and from work, not to mention other places where we enjoy good reading and where we can't take our PC with us! However, maybe there is some value in having a few lines in SAFO reviewing web sites related to aviation and modeling. To begin, I would like to pass on the following comments to a Portuguese page.

"Early in this year, I found a web page for Portuguese military aviation at [www.geocities.com/CapeCanaveral/Hangar/9376](http://www.geocities.com/CapeCanaveral/Hangar/9376). This page is entirely in English so a large number of people may access the information. It is maintained by FAP's Cor. Carvalho e Mimoso and by ex-FAP officer Eng. Luis Tavares, two top investigators in the subject. After entering the page, there are several options regarding different subjects (camouflage schemes, list of a/c, units and bases,

etc.).

"Some of these options are almost empty of information because the page is being built according to the author's available time. Nevertheless, the page suffer constant changes with new and interesting files (you can know which are new by choosing the What's New link). Some options, like a/c data sheets and photo gallery are excellent. Check out the C-47, F-86, Albatross, and B-26 (with operational photos of our Invaders in Angola), plus some rare photos of a/c like the B-24 and B-17. The latest photogallery is of the Noratlas with overall anti-radiation green camouflage.

"The information is accurate, with the exception of a few minor errors, no doubt typos. Visitors are welcome to contribute especially in the subject of allied interned a/c during WW II; just e-mail the authors. In conclusion, if you are interested in Portuguese aviation, you must visit this page. In any case, my advise is to take an hour and enjoy this site. "Regarding the new 1/48 T-6 model from Portuguese Occidental Replicas: Beware of the decals. A photo of '1723' without the greyhound insignia appears in the T-6 In Action book. This insignia was the symbol of BA 3 and it was never used in Africa. To do the version with the greyhound, you will have to invert one of the decals, since the greyhounds run towards the engine on both sides of the fuselage."

Carlos Oliveira (SAFCH #1366), Av Carolina Michaelis, n 1, 4-Dto, 2795 Linda-a-Velha, Portugal.

[Editor's note: Links to other web pages appear on the SAFO web-page [bartoli.com/safo/](http://bartoli.com/safo/). However, if SAFO readers are interested enough in web pages with small-air-force content to send in reviews, I will initiate a regular section in SAFO devoted to reviews of web pages.]

## -wants&disposals-wants&disposals-wants&disposals-wants&disposals-wants&disposals-wants&disposals-wants&disposals-

"My next project, commissioned but not necessarily certain for publication, is on air wars 1793 to 1914. Obviously much of this concerns balloon activity and may be outside SAFCH's remit. However, when I tell you that balloons were used, during this period, in many colonial wars in Africa and Asia, as well as South American and China, maybe our members could help? Could you put a note in WANTS for any information on use of military balloons before 1914. The American Civil War is well covered Spanish-American 1900 and Mexico aren't covered so well. I will appreciate any help." John Cochrane (SAFCH #905), 6 Bonnington Avenue, Crosby, Liverpool L23 7YJ, England.

"I collect air force, navy, and army PILOT WINGS from the world's different air arms. I only collect pilot wings that are worn on pilot's dress or duty uniform not flight suits. I am a collector and not a dealer. I am not in this hobby for profit. Over the years I have been able to add quite a few wings to my collection, but there are always more to find. The hardest wings to find are obviously from the smaller air arms where not very many wings were manufactured. I have very few air force wings from

African air forces or the new air forces from the former Soviet Union. I also seeking pilot wings from Latvia, Estonia, Lithuania, Cambodia, WWII Luftwaffe and the 1950 era French Indochina Air Forces as well as others. I try to collect only the authentic wings. No restrikes or reproductions please. I do have a limited number of wings to trade. If any fellow SAFCH member is interested in trading or selling wings, or you know of someone who is disposing of a collection, please contact me and include a photocopy of what you have. I can promise you that your wings would be given a good home in my collection. Yes, I also collect AIRLINE PILOT wings. I look forward to hearing from my fellow air force enthusiasts. All letters will be answered."

Tom Malloy (SAFCH #1414), P.O. Box 46, Green Village, NJ 07935, USA.

"Information wanted on the Bf 109E sent to Japan." Tom Perry (SAFCH #156), Box 1711, Hillsville, VA 24343, USA.

"Wanted: Information and photocopies of

photographs of early postwar Vietnamese, Cambodian, and Laotian aircraft (including airliners), circa 1949 through 1955, markings, color schemes and insignia. Will pay cost of copying and postage." Charles Euripides (SAFCH #1286), 5408 Willow Croft Court, Charlotte, NC 28226, USA.

"Wanted: Information on the book, 'Radaranlaeg i Danmark fra 1942 til 1945' (Radar Stations in Denmark 1942-1945), by M. Svejgaard. Published by Miljoministeriet, Skov- og Naturstyrelsen 1992." Jan Poul Petersen (SAFCH #978), Emdrupvej 66 2. th., DK-2400 København NV, Denmark.

"For Sale: Collection of Kuwait Air Force posters of all types of aircraft used. Other items for sale. A few slides and photos to order. Poster set has 13 types of KAF aircraft plus large fleet poster. KAF small history books, in English (or 'rare' Arabic version) with photos of aircraft. Lists." A.J. Moitie, 9A Edward Way, Ashford, Middx TW15 3AY, England. Tel 01784 210847 (UK).



**a**



**b**



**c**



**d**



**e**



**f**

a



b

